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THE AMERICAN PSYCHOLOGIST

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THE PROFESSION OF PSYCHOLOGY AND THE SOCIAL VALUES OF PSYCHOLOGISTS

The five papers which follow were presented as a symposium on "The Profession of Psychology and the Social Values of Psychologists" by the Society for the Psychological Study of Social Issues at the 1953 meetings of the APA in Cleveland. The symposium was chaired by Professor Donald G. Marquis of the University of Michigan. The papers are presented here in the order in which they were originally read.

TOWARD SCIENTIFIC AND PROFESSIONAL RESPONSIBILITY

M. BREWSTER SMITH

Social Science Research Council

OW are responsibility and values related? By values I shall mean a person's implicit or explicit standards of choice, insofar as they are invested with obligation or requiredness. Values are closely related to ends or goals, but not all goals are values in this sense; for the American child, the eating of spinach becomes much more value-laden than the eating of ice cream cones. Responsibility has to do with the relation of a person's behavior to his values. One could also include the kind of values to which the person subscribes. To simplify my task, however, I will assume that our new code of ethics indicates that we are in fair consensus on a number of generally acceptable values. Our ethical problems, it seems to me, may have more to do with the relation of our values to what we actually do as psychologists than with what our values happen to be.

As I intend to use the term, then, a person acts responsibly to the extent that his behavior meets at least these conditions: First, he is aware of the value context in which he is acting. His goals have been subjected to conscious scrutiny, and his behavior is explicitly related to his values. Second, his choices are made in the light of as adequate an understanding of their probable consequences as he can achieve. The relations that he assumes between means and ends are examined critically, not taken for granted. Third, he is ready to be judged in terms of his choices of both ends and means, and has the flexibility to reconsider both. In a word, he assumes responsibility for his decisions and actions.

If these remarks sound like pious platitudes, perhaps it is an indication that there is indeed consensus on responsibility, so conceived, as itself a value. Yet as we know, personal motives and conflicts between values often stand in the way of responsible action. Some of the other members of the symposium are addressing themselves to sources of irresponsibility in the social situation of psychology. For my part I should like to examine some of its forms. I have eight sins—mortal or venial—for your consideration.

Fixation on means. One can easily find in the activities of psychologists examples of a kind of "functional autonomy of motives," in which too narrow a focus on means leads to behavior that hardly advances the goal values toward which it is still presumably oriented. Consider, for example, fixation on the trappings of science. Are we really pursuing the advancement of understanding, we may from time to time ask ourselves, or are we being sidetracked by our indiscriminate enthusiasm for a particular fashionable gadget, or research technique, or convention of statistical analysis? Fads in research topics and methods may result, to a larger extent than we like to admit, less from the concerted pursuit that follows a significant "breakthrough" than from failure to keep our sights set on goals within the larger context that gives significance to our scientific activities. Fixation upon trivia is the easier for us because of the naiveté with which "common sense" and college sophomores pose problems for psychology. From legitimate insistence on formulating our own questions in ways that permit scientific investigation, it is only a step to smugness that sometimes seems to attribute ritual significance to the forms of science.

Means can become ends in the professional as well as the scientific aspect of psychology. Shall the patient be vertical or horizontal; is the tradition of Rorschach interpretation to be preserved intact at all costs; how sacred is the feeding schedule or the permissive attitude? Heat tends to exclude light when means are taken as ends in themselves. Happily, functional autonomy in this setting is incomplete, and the ends of effective therapy, diagnosis, or upbringing, though sometimes latent, are rarely abandoned. A clear view of means as means—that is, in relation to goals—is the best safeguard against fixation on them.

Absolutism of means. The second form of irresponsibility in my list shades into the first without sharp distinction. By "absolutism of means," I mean positing such an invariant, rigid, or foolproof relation that the need for evaluating the appropriateness of means to end is supposedly bypassed. The examples I have in mind here—controversial ones, to be sure—involve conscious commitment to the means rather than blind fixation. But the results may be much the same. Through the insistence that things are conveniently simpler than they are, the psychologist excuses himself from responsible choice.

Consider first the gospel of democratic group process. Impressive data indicate that when a teacher, leader, or "change-agent" thrusts the members of a group on their own resources, the changes that occur in their knowledge, attitudes, and behavior, coming as they do from within, have stability and personal significance that cannot be attained through more didactic or "authoritarian" procedures. This is an important discovery. It does not follow, however, that authoritative intervention may not often be indispensable, nor does it mean that the democratic techniques or reasonably exact facsimiles thereof-may not be employed in the service of questionable objectives. What is irresponsible, because it rules out discriminating choice where choice is needed, is to set such stock on the technique per se that questions of its suitability to the objective, or the desirability of the objective itself, are overlooked. It is misleading to assume, for instance, that democratic group process as employed by management consultants automatically guarantees a democratic result in keeping with the best interests of worker and supervisor alike. Much manipulation is rationalized in the name of democracy.

When it is elevated to dogma, the parallel nondirective technique in psychotherapy may present similar pitfalls. Only to the extent that the therapist is aware of the degree and nature of his intervention can he direct his *own* role in therapy responsibly.

The foolproof technique, the "simple and sovereign" relationship, has appeal as it promises to let us avoid or delegate responsibility for judgment in the face of complexity. Even if our attempts at simple principles turn out to be valid, however, their application to complex real situations will surely continue to require the best and most explicit judgment we can muster.

Absolutism of ends. Here I turn to another controversial matter. Psychologists and other social scientists have helped to undermine the absolute standing of traditional, theologically supported ends and values. We are perhaps ready enough to detect an abdication of responsibility when persons justify their choices by recourse to a superhuman scheme of things, or to the ways of our own culture writ large as the proper ways of humanity. Yet the search for values to fill the gap left by theology has often remained a quest for other absolutes with some of the old magic. Psychologists have on occasion offered or imposed their own partial values as absolutes blessed in the name of science. I am thinking for example of "adjustment," which as a be-all-and-end-all is already in sufficient disrepute to make my point clear. It is certainly not irresponsible of psychologists to favor adjustment and to seek to promote it; the difficulty comes when we mislead ourselves and others that science lends its authority to an obligation to be adjusted. Science can of course do no such thing, and the pretense that it can closes off prematurely the exploration of alternative standards.

The choice of ends is a personal matter, which can be exercised responsibly or irresponsibly, or abdicated in favor of tradition or mere conformity. As scientists, we have the special competence to consider the bearing of an important realm of facts on the choice of ends—facts about the side consequences, the boomerang effects of our choices. The pitfall for us to avoid, however, is losing sight of the element of personal choice that remains once the facts are in.

Escape into relativism or "value neutrality." Seeing that science yields no absolutes, psychologists may, conversely, try to make peace with themselves by raising the anthropologists' banner of cultural relativism-values are a chance of nurture to be accepted without fuss as one accepts table etiquette. Or they may flatly deny that the realms of scientific fact and value have anything to do with one another. But the psychologist cannot stop making choices, as scientist, teacher, therapist, or human engineer. The choices may be witting or unwitting, responsible or irresponsible, but they are made, and they entail consequences. Acceptance of the values of one's culture as given and beyond reconsideration implies a conservative choice; it can add the psychologist's voice, in fact, to the crescendo urging total conformity, a trend which in the long run may be not at all conservative of our traditional values. And the claim to a value-free science, when it goes beyond insistence on a disciplined regard for fact whether or not it accords with our wishes, only obscures the value elements in the choice of problem, of research setting, of conceptual framework, in the decision as to when to rest with negative findings, when results are reportable, and so on endlessly. Only if we know what we are choosing, only if the values involved in our choices are explicit, do our decisions become responsible

Isolation of conflicting values. Some of the devices we have already listed, as well as still others, may have their appeal because they serve to isolate conflicting values from one another. Insistence on value neutrality may, for instance, serve to contain a conflict between major values for the psychologist who must depend for the support of his work on sources that are not equally disinterested. Isolation -"logic-tight compartments"-may be an essential expedient in the functioning of a less than perfectly integrated society or personality. It excludes, however, the productive interplay in which new means of resolution may be invented and previously held values redefined, and from which can emerge-much as the common law grows from successive judicial decisions-workable consensus on fundamentals and priorities. Conflict, after all, is a serious and difficult matter that is hard to face, harder to tolerate, and hardest to resolve. But the more squarely we are able to confront the alternatives in making our choices, the less frequently

we are likely to encounter basic conflicts that exceed our powers.

Token payments to conscience. One response that many of us make to value conflicts in science and profession as in personal life could be tagged as "token payments." We have our cake and eat it too, but only because we take a small, not very nourishing, bite. Caught between our obligations to research and to our teaching, professional, or administrative duties, we appease conscience by writing little research papers-not very good or very significant, to be sure, but neither do they detract very much from the performance of our other obligations. In a program of applied research to satisfy a client, we work in somehow a methodological study to present at the altar of science. Vacillating between commitment to science and responsibility as citizens, we act as if doing a little study of, say, prejudice would show that we are on the right side.

Good results obviously come from these compromises. But if we were more fully on to ourselves as scientists and professionals and citizens, perhaps we might advance our values more effectively. Much research that is done for the sake of such a token payment to social responsibility might as well not be done. The topic picked as a compromise is often not strategic either for scientific advance or for social action. And the effort that can be committed to the investigation is often insufficient to achieve more than token, "suggestive" results. If the conflict were squarely faced, perhaps one would then be in a position to choose between making a more ambitious effort or none at all; perhaps one would decide to capitalize on the advantages of the ivory tower rather than bemoaning its isolation; or to play scientist and citizen on separate occasions, not in combination. Or one might come back to the same compromise as the most satisfactory resolution. At all events, the decision would be a considered one.

Parochialism. Involved in most of the blind alleys we have explored is, in fact, a kind of blindness—of cognitive inadequacy that precludes explicit and adequate decision. The parochialism of our particular perspectives as psychologists can also limit the range of appropriate choice. The vogue of perception-centered theory in social psychology, for example, may without our intending it leave us preoccupied with social perceptions at the expense of social facts. The facts are outside the

competence of our psychological kit bag, while it is easy for us to ascertain what people think the facts are. Important as it is to understand people's perceptions, such a partial description points more obviously to the techniques of the public relations man than to more direct measures for coping with unsatisfactory situations. Psychological warfare and employee relations programs seem, indeed, to be most popular where the juggling of appearances appeals as a painless short cut that does not disturb the *status quo*. Perhaps psychotherapies that center on altering the person's self-perceptions have a similar appeal.

Whenever we seek to apply psychological knowledge to the world of affairs in which the psychological is only one of several relevant aspects, parochialism is a real danger. Psychologists could make a more valid claim to be consulted in councils of high policy if we were less prone to regard the factors that we know most about as the only important ones. Problems of communication and its failure, for example, seem to us inherently psychological; we leave power conflict between organized social structures to the political scientist. But if we then prescribe better communication as a panacea for situations of power conflict, we give poor and irresponsible advice. If "wars are born in the minds of men," individual tensions, frustrations, and misunderstandings take on political significance only as they occur in organized social contexts. Responsible recommendations on policy require of the psychologist an understanding of the place of his distinctive contribution among those of

the other social disciplines. Knowledge of our limitations should increase our real power.

Professional vanity. It is still a new thing for psychologists to find their advice on important practical affairs sought and sometimes heeded. Perhaps it would be well for us to remember the limited aspects of our field that have actually paid our way and won for psychology the ear of practical men: aptitude testing, clinical counseling, and a few others, none of which are very close to what we like to think is the theoretical core of the science. As scientists we are still groping—perhaps as professionals, too. When we are tempted by fantasies of power to try to set the world in order, we need an occasional dose of scientific humility. The hardheaded approach that insists on systematic doubt in the absence of confirmation, and holds even established propositions with tentativeness, remains our special contribution. We can ill afford to neglect our function as scientists in the pursuit of problems that are too big for us to cope with. Our responsibility must be measured against our competence.

My strategy in this paper has been to focus our attention on the implications of responsibility, on the assumption that since it is a value that we already share, explicitness about it should make us more likely to act responsibly as psychologists. Explicitness about the relation of values—including this one—to our behavior would seem to be a necessary if not sufficient condition of rational progress toward valued goals.

Received February 1, 1954.

SOCIAL PRESSURES AND THE VALUES OF PSYCHOLOGISTS

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THE report of the APA Committee on Ethical Standards for Psychology, adopted in September 1952 by the Council of Representatives wisely makes some differentiation among obligations psychologists hold as scientists, as teachers, as practitioners, and as citizens. For the purposes of that report, entitled *Ethical Standards of Psychologists*, a rather general type of differenti-

ation of those roles was apparently thought adequate. The basic contention of the report is, properly, the priority in ethical mandates of broadly human interests. Many of its principles contain substantially this wording: "The psychologist's ultimate allegiance is to society, and his professional behavior should demonstrate an awareness of his social responsibilities."

I wish to analyze somewhat more precisely than did the APA Committee certain roles of psychologists and particularly to discuss social pressures associated with each role. This analysis and some attention to the sociological and psychological nature of roles may help to elucidate the character of social forces constantly bearing upon the definition of values by individual psychologists. These pressures make both for and against social responsibility. Toward the end of my paper I shall deal with methods available for organizing and fostering situations and forces which make for social responsibility and against social irresponsibility.

The roles I should like to discuss are of three ypes:

- 1. Professional: (a) scientist, (b) teacher, (c) clinical practitioner, (d) engineer, and (e) popularizer.
- 2. Economic: (a) independent, (b) partner or "team member," (c) employee, (d) entrepreneur, and (e) manager.
- 3. General: citizen, civic leader, party worker, political spokesman, and many others. Individuals fulfill in combination and in sequence various collections of these roles. To meet what they perceive to be the requirements of a changed situation, they change their roles during their days and their lives.

As students of culture, subcultures, and personality, we are aware that social roles and their associated values are social products that have for the time dogmatic definition and considerable stability. Their dogmatic definition gives them an illusory preciseness provided by stereotyped symbols subject to a range of interpretations.

Socially important roles have façades describable typically in symbols with vague or multiple referents. Although the actual behavior patterns of scientists, teachers, and clinical practitioners are rationalized with such façades, they more accurately and compellingly resemble group mores. In a wide range of professions, the more practical and expedient moretic patterns are taken for granted rather than discussed. Initiates take them on by emulation and as a result of confidential advice rather than, as the usual thing, formal instruction. I am referring, of course, to matters covered by moral and moretic principles and not to routine practices.

A lot of the confusion in formal discussions of

values—even in committees of the APA, to judge by the Committee report—arises from a lack of recognition of (a) the multilayered character of roles and hence of associated values, and (b) the operations of attitudinal multivalence in changes in an individual's value orientations as he changes roles in response to apparent changes in situation. Discussions of values or of ethics ordinarily oversimplify the characteristics of personality and culture. A tenable analysis of ethics takes into account the complex nature of culture, the dynamics of the group or groups, and whatever else we may know that is relevant to the possibilities of individual behavior.

In the Committee report and, I believe, in general statements about psychologists, idealisms associated with the roles of the independent scientist and the independent physician tend to dominate contentions about the proper values of psychologists regardless of the character of the more specific roles which they may perform professionally and economically.

This over-all stereotyping has such consequences as these: All sorts of psychologists are under compulsion to rationalize their public behavior with the artificial criteria. This comes to be done through more and more sophisticated torturings of words, the sort of thing so bitingly caricatured in George Orwell's novel 1984. Psychologists in many roles inevitably and in many ways fail in this task; they succeed chiefly in debasing the verbal symbol, "psychologist."

In this discussion, I am naturally taking the socially naive position that a code of ethics for a professional group can and should describe reasonably tenable mandates for behavior. I am not subscribing to the typical position of so many social sophisticates that a code of ethics furnishes a verbal front behind which business may be conducted as usual with more impugnity.

Let us look briefly at the first group of roles listed.

Professional Roles

Scientist. The scientist as scientist is, in terms of work-a-day notions, an undependable fellow. Regardless of how he is paid, if he is really a scientist he works primarily for rewards other than the financial. This does not mean that, to give the impression that he is a 100% American, he may not inform his associates that he is suitably preoccupied

with financial gain. But he is particularly absorbed with discovering things about human behavior, or whatever his specialty, that others have not seen. He tries to understand what he has discovered regardless of what violence his new understanding might do to established theories. He cannot brood too much about the consequences of his work because scientific work has such complex multiple consequences, mostly unforeseeable. In extreme cases, the fellow might be as upsetting and as undependable as a Sigmund Freud.

Long ago we learned, of course, that if a scientist were content with being a foot soldier, if he would concentrate upon filling in detail, upon increasing the preciseness of reports and tables, upon minor fretwork rather than upon major architecture, his labors would not be likely to shake an institutional applecart and would be appreciated and rewarded. His contributions, when properly conceived and channeled, might even make some applecart more stable and its passengers more secure. It is because such opportunities are now more numerous in the relatively settled physical and biological sciences that so many of their devotees become institutional functionaries, that is to say, become housebroken or bureaucratized. Their work may have objectivity, but it has other points resembling that of monastic scholars. Such technicians accept the major intellectual framework of a cult, and they spend their lives polishing and sometimes reworking trivia. Then, just as each priest of a great religious denomination is by virtue of his status holy, so every surrogate of institutionalized science is by virtue of that status a scientist. In both cases, a few stimulating, irritating, and sometimes productive crackpots are enshrined when they either have become respectable with age and popular acclaim or have died.

Until recently, some British fortunes and many American colleges and universities provided conditions of an unusually hospitable nature under which the independent scientist might develop and work. In American higher institutions of learning, in spite of commercial competition for personnel, psychologists were able to support themselves as teachers and still have time to carry on their own personally chosen research as independent scientists—before the recent inflation and the development of extensive social science research bureaus. This helped sciences in America to become to such a great extent "textbook sciences," sciences for

people to study rather than merely special tools for special interests.

In this country, sciences had their early growths primarily in connection with academic departments, and new developments were frequently first interpreted to students and even initiated with them. Our sciences thus gained strong humanistic orientations. But recently such orientations have been disappearing-even in psychology and the other social sciences. Idealisms concerning how a scientist should behave have not changed, as Ethical Standards of Psychologists indicates, but the values held by psychological scientists have changed. When contributions become most expediently functions of research projects sponsored by government or industry, one does not have to be a profound student of rationalization to realize how different from those of a liberal arts professor-scientist interpretations of "ultimate allegiance . . . to society" are likely to become.

To sum up, ethical conceptions of the scientist's role—like so many other ethical formulations in our society—reflect nostalgic idealizings more than they do values likely to be held by work-a-day journeymen psychologists who are called scientists. To the extent that this confusion helps to shelter the erratic, but productive, psychological scientist from the antagonisms of the anti-intellectuals, the confusion is useful. If the role of the psychological scientist were narrowed in popular definition merely to those who make substantial contributions to the subject—fortunately an impossible notion—it would also provide a more precise target.

Teacher. As noted above, the teacher-scientist is passing as a central figure in the development of psychology and other sciences. The ranking professor who is now not a director of research projects is thought old-fashioned. Who will take his place in scientific innovation is not clear. One would offhand expect the independent clinical psychologists to be disproportionately stimulating in their areas of interest and competence. But in general professional leadership and control, the research bureau directors and other entrepreneurs and managers of research projects have become central and dominant. They may, some of them, still be called professors or academic directors or deans, but their gravy-train values are at odds with their academic robes.

In this and in many other ways, the ideal role of the free and independent liberal arts college and graduate professor is being eroded and perverted now as never before. Most effective in this are the inroads of the mores-minded-as opposed to moralsminded—trade school professors into the teaching budgets and the student schedules of our higher educational institutions. Professors of education, engineering, business administration, journalism, public relations, social work, and all the rest have legitimate roles, in my estimation, in advanced professional schools, but they now tend to usurp more and more of student time that would be more profitably allotted to basic general education and to advanced training in the basic arts and sciences. Possibly academic departments of educational psychology, human engineering, personnel administration, mass communication, and social psychiatry or psychiatric social work will become scientifically productive, and something more than instruments of rehash and oversimplification, but my impression is now that they are comparatively sterile in the quality although certainly not in the volume of their contributions to the literature.

Significant in this situation is the fact that the professions and industries related to these departments and schools regard the professors as necessarily "their boys," assimilated members of their professional or trade cults. These professors are under rather clear compulsion to promulgate respectably rationalized versions of cult values, and they are frequently called upon to certify the value commitments of their former students to potential employers. It becomes all too expedient for colleges and universities to be cooperative in hiring industrial nominees rather than persons who meet reasonable academic criteria of professional accomplishment. Professors of personnel are thus necessarily oriented to industrial enterprise and not more generally to humanistic goals, to managerial and manipulative interests and not more broadly to the nurturing of student interest and capabilities.

Clinical practitioner, engineer, popularizer. Psychologists in these three roles have things to sell that they fashion and, as it were, package for the market, to meet the apparent needs or demands of putative patients, clients, and publics. This is rather different from the ways in which scientists and teachers function. Scientists follow their curiosities, and teachers perennially concern themselves more with what society and their students should have than with what people will most readily buy. Psychologists in these three roles thus in varying

degrees find their values bent toward consonance with gravy-train mores of our society's central status ladder, of our generalized power and prestige struggle.

Clinical practitioner. Psychologists have apparently had most trouble with maintaining reasonable ethical standards for those who call themselves clinical practitioners. Legal licensing arrangements and organization against quacks, as well as certifications by professional societies, are the familiar policing efforts in this field.

In its section on "Ethical Standards in Client Relationships," the APA Committee report notes: "The ethical psychologist, like the ethical physician or lawyer, governs his relationships with other people by principles which give responsible direction to the employment of his technical skills, and which imply full acceptance of responsibility for professional actions." Just what such a statement might mean is not at all clear, even though it sounds noble, but the reference to the physician and the lawyer is significant of the stuff out of which ethical sanctions are built. The clinical practitioner in psychology wears a tunic made from swatches out of ancient robes of shamans, parish clergymen, family physicians, and family solicitors, but the vestment is at least as much of a masquerade as the regalia so dear to the British.

The APA Committee reference neglects (a) sweeping changes in both the medical and the legal professions with which professional ethics have not yet succeeded in coping, (b) the greater similarity of clinical psychological practice to contemporary, than to the passing individualistic, medical and legal practice, and (c) the consequences of attempting to use as a public definition of a professional role such a patchwork of borrowings from the ancients. To bring the clinical psychologist's personal values and group mores and the societal anticipations held for him into somewhat more similarity, the ancient moral vestment needs remodeling even though it would be unwise to try to replace it with one obviously made from new materials. Just think of the necessary complexities involved in applying Principle 2.13-1 of the APA Committee report:

Individuals and agencies in psychological practice are obligated to define for themselves the nature and directions of their loyalties and responsibilities in any particular undertaking, and to inform all concerned of these commitments. In a bland, superficial manner, this is not difficult, but ponder its complexities—not to say its impossibilities—in many important kinds of situations. To what extent is this principle likely to be used to guide, and to what extent is it likely to be more useful propagandistically, to defend slick practice?

Principle 2.15–1 in the APA Committee's section on client relationships deals with a crucial area:

It is desirable that a psychologist engaged in clinical or consulting work, where sound interpersonal relationships are essential to effective endeavor, be aware of the inadequacies in his own personality which may bias his appraisals of others or distort his relationships with them, and refrain from undertaking any activity where his personal limitations are likely to result in inferior professional services, or harm, to a client.

To all of which a fair-minded person must naturally append a pious amen. In gross cases, answers here as elsewhere may be clear, and various pressures may be sufficiently operative to make adherence to the principle expedient. But the probably far more important subtle matters are not clear to psychologists, their patients, or their ethics committees. Need I ask, Who is free of bias, bias that inevitably distorts his work? Who is wholly aware of his biases?

Engineer. Under this label, I am referring to consultants and investigators who specialize in applied social psychology. Their fields are now often called human relations, social relations, public opinion, public relations, social action, action research, social surveys, human engineering, group dynamics, community relations, and even sociatry. The APA Committee report does not deal extensively with this area, possibly because psychologists are not as concerned here with competition from the untrained and the phony. The clients for social psychological engineering services are corporations, political groups, governmental agencies, and voluntary organizations of some size, not in most cases individuals. Such large bodies are, in general, better able to defend themselves against unethical practice than are the patients of clinical psychologists.

The most pressing ethical issues concerning the applied social psychologist's role as engineer arise, as I see them, chiefly out of (a) academic subsidies from interested sources and (b) temptations for commercially subsidized organizations to "economize," in other words to shortcut, to fudge, and to fail to report all necessary details. Sections 1, 4, 5, and 6 of the APA Committee report at-

tempt to cope with many specific aspects of these situations under the headings of public responsibility, research, writing and publishing, and professional relationships; but problems of academic subsidies remain in need of much more attention. To illustrate, I have in mind ways in which academic departments and bureaus, with their taxfree statuses and their available student help, sometimes (a) exploit graduate and even undergraduate students under the guise of giving them allegedly valuable experience, (b) offer unfair competition to commercial organizations and to nonprofit unaffiliated investigative institutions, and (c) succeed in eroding humanistic liberal arts values and standards in ways suggested in connection with the discussion of the teacher-scientist.

Popularizer. In my estimation, all scientists are indebted to the endowed science news agency, Science Service, to the more responsible publicity officials of academic institutions, and to other science news reporters for the increasing quality and volume of science reports and interpretations in popular mediums. The efforts of these specialists have helped to make scientific psychology more widely understood. They have helped good psychology to minimize somewhat the phony in public discussions. The accomplishments are still far short of what psychologists and other scientists would like to see, but when viewed in a historic perspective the gains are impressive.

In a positive approach to the matter, the proper training of psychological popularizers should be a major concern of psychological educators.

So much for the five professional roles taken as representative. They are closely linked with the five economic roles listed at the outset. Let us now turn quite briefly to those five economic roles.

Economic Roles

Independent. The independent role is especially and necessarily associated with the professional role of scientist. Regardless of finance, the scientist is working under the least handicap professionally when he feels that he can approach his problems as an independent without concern for payrolls, institutional continuity, or even professional advancement. In terms of 100% American get-aheadism, he is an absurdity. Only our sacred engineers "make sense."

Ideally, the teacher and the popularizer should also feel free to pursue their professional goals with

a maximum of independence. Even though the teacher is ordinarily salaried, to the extent that the guarantees of academic freedom, lack of involvement in administrative detail, and insulation from outside pressures are functional, he can practically be an independent operator, one of the most independent in our society. When he is that independent, his contributions to his specialty and to his students and thus to society are likely to be at a maximum.

Partner or "team member," employee. Team work has its merits in industry, government, and other actionist pursuits. As members of the business community, human engineers make much of being good team members. But the growing insistence of so many Americans that everything can best be done through joint endeavor can be disastrous to scientists and teachers.

Fellow scientists can and should get together, instruct each other in new developments and different approaches, compromise terminology in the interests of adequate professional communication, and generally stimulate one another through socialization. But research, it has been so many times demonstrated, is best carried out by one person or under the direction of one person. I do not include routine investigations and tests, as you will recall, under research. Teams can at best issue reports of joint consensus based upon recollections of individual research.

Teams of fellow teachers can profitably get together for the same purposes. Generally speaking, however, courses taught by panels or committees or teams are diffuse, not well integrated, and lack challenge to the better students. They are chiefly useful as exhibition pieces for special moneyraising ventures and for the publicity office.

The team member is, in many ways, the beau ideal of the salaried middle-class professional in industry or government. It is disastrous to say of such a person that he is angular in his interpersonal relationships or that he is too aggressive or that he is too individualistic. High praise is that "Joe can really work on a team," the team being naturally "our team." This praise works both with the partner and the employee. Actually partnership is more of a fiction than an actuality; the one who "puts over the deal" with a foundation or a client or a customer usually calls the tune and in effect employs his "partners."

Entrepreneur, manager. It is an old story that

in both research and teaching entrepreneurism or managerialism is the end of the researcher or teacher and the beginning of the dean or president. The latter, I hasten to add, are useful and even essential functionaries, but for all their resounding speeches they are primarily administrative promoters, apologists, and fixers rather than scientists or educators, no matter how much they wear their old togas.

In a civilization that glorifies entrepreneurism and places crushing responsibilities upon its managers, it is to be anticipated that the shortest road to fame in psychology or any other learned field is to exhibit virtuosity in those specialties—one or both—as soon as possible. Once you can prove that you are an operator, that you have or can make contacts, that you can get things done, the other perquisites valued in our society will be given to you, even ghost writers, IBM technicians, and other flunkies.

General Roles

Among general roles, pressures are now powerful to deprive psychologists and other social scientists of their most important nonprofessional public roles. I need not recall here again the ominous progress of McCarthyism in the destruction of intellectual values at home and of American prestige around the world. But in a democratic society, a society, too, in which a great many people can with effort understand psychological contributions, the psychological profession-if not the individual psychologist-has obligations for the application of scientific findings to public policy, for the development of an ever more enlightened morality based upon scientific research. This means that certain psychologists must defy the McCarthys, and it certainly also means that their profession and their employing institutions had better bethink the fate of German institutions under the Nazis and support their deviants here today.

So much for a brief outline of pressures associated with these groups of roles. What methods are available to foster and organize situations and forces that would make for social responsibility and against social irresponsibility? I have touched upon some of these in passing, but I should like to sum up here some suggestions.

Ethically and practically, the welfare of psychology depends—as does that of any science—upon the welfare of its scientists and its teachers.

The scientists furnish the science. The teachers not only reproduce the profession, but they furnish much of any profession's ethical leadership, its sense of moral integrity. When scientists can work at scientific problems, whether pure or applied, without feeling that their conclusions are necessarily prejudged, their curiosity is likely to benefit the science. When teachers can devote their attention to students and are not under financial and institutional pressures to exploit their students and the teaching process, their labors are likely to help build a sturdier science and profession.

To help maintain and develop psychology, therefore, psychologists need especially to assure working conditions for psychological scientists and teachers that will permit them to continue their valuable contributions without compromise. To the extent that this is accomplished, the psychological specialists in fields requiring less puritanical ethics will find it both easier to maintain reasonably high standards and also gradually discover more public respect for their profession.

The APA Committee on Ethical Standards for

Psychology labored and brought forth a remarkable first detailed attempt at a psychologist's code of ethics, but let us not permit the weight of their efforts to confuse us concerning the probable consequences of their work at this point. From what we know concerning the relative stability of group subcultures that contrast with societal morals, the multilayered character of roles, and attitudinal multivalence, the code is too bland, too flat to satisfy either critical psychologists or skeptical sociologists.

The APA's code of ethics should be a model for other professions, trades, and businesses in its recognition of what are ordinarily called emotionalities and irrationalities. To furnish psychologists with a guidebook that will help them to build a more and more substantial profession in this anti-intellectual world, the code must be psychologically and sociologically adequate and not merely a fine traditional moral document. I trust that the next draft will be such a working, shirt-sleeved statement, a genuine novelty among codes of ethics.

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ON THE EXPANSION OF PROFESSIONAL PSYCHOLOGY

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HEN the clinical psychologist reviews the state of his profession he has much reason to wonder. We are adapting ourselves to new forms of professional functioning without exactly knowing what to make of them, nor how to cope with the new responsibilities which we have taken upon ourselves. We spend a good deal of our collective time debating just how professional we ought to be. We seem to be overlooking at the same time that we are already part of a social process which, by the very nature of interaction and dependence upon other social processes, is no longer determined exclusively by our scientific aims.

The shape of professional psychology actually appears to be affected by a multitude of social and economic factors very different from, and perhaps more powerful than, scientific theories and methods by themselves. The motive for this paper derives from the suspicion that we have less influence over the social forces with which professional psychology has become intertwined than our debates would indicate. Hence it follows that we are in great need of understanding better what these forces are. Can we be sure that the profession is not already moving away from the realization of its best potential into the dead end of a professionalism without the impetus of significant ideas and a vital social purpose? The backdrop of the scene, as of all social vicissitudes in our time, is that of industrial mass society. Instead of examining the figure of psychology against that background, however, we have so far stuck to our traditional specialist issues. When we talk about training, which is but another word for the continuation of a profession, the ardor of psychologists usually goes to to the time-honored argument of methods. Observing us in that engagement, an outsider must think that our professional consciousness rests on a strange faith, for we act as if the operations of science were suspended in social mid-air. We profess that we are concerned with ideas; by the way we stress them we imply also that nothing else matters. The onlooker might well conclude that research in behavior holds its own answers as well as its own self-sufficient conditions.

Yet our work is not only of people, but also by and for them, though we may sometimes seem a little diffident as far as the last proposition is concerned. Nor is a scientific profession entirely a beehive of intellectual activity; for its members it means career, status, prestige, struggle for security and advance, power-in short, social interaction and involvement and all the complex obligations of a social role. The term "professional psychology" hence has broader implications than are usually attributed to it. It would be a fateful mistake for other psychologists to believe that it means no more than to apply some controversial techniques to certain ill-defined needs. Through a curious misapprehension, clinical psychology has come to be held the only promoter of the professionalization of psychology. Quite obviously, psychology is becoming professional on many more fronts and for much larger and more diverse reasons than those involved in the practice of clinical psychology. Many of the techniques and topical concerns of traditional "basic" research have in recent years been put into the service of extremely practical goals. Professionalization is an immediate consequence of the size and expansion of a group whose members have specialized knowledge and skills. The need for these skills follows from the emergence of acute social problems which, in turn, is probably the consequence of social change on a large scale. Professionalization occurs when a group of specialists possesses instrumental skills that suit the social demand. Once it has taken shape, it requires internal organization and an enduring concern with large-scale administration of rules and standards. Its advent is bound to bring with it a certain measure of bureaucracy. On the other hand, professionalization means also application and appeal on a larger scale, and so brings about a more intentional and a more effective participation in the social process. Hence come new concerns with prestige, power, and with relationship to other institutional groups.

The following comments derive their situational definition from clinical psychology only because I happen to be most familiar with its routine details. Clinical psychology may also show more clearly certain general problems of professionalization than other areas of psychology. I shall concern myself with some changes in attitude, and hence values, in the professional development of clinical psychologists. These changes seem to me to point out the direction toward which clinical psychology is at present moving, both as a social function and as a role.

It is notoriously difficult to define a specific instance of social change. It will be even more precarious to do so if the points of comparison are hardly more than 20 years apart. For some aspects of change, such as psychologists' incomes, we can cite statistics; other equally important aspects of that process, such as the recasting of role and identification, can only be stated as impressions and amplified by interpretation. I shall suggest some necessarily schematic formulations about the psychologists' economic expectations and the relation of these to their motivations for entering psychology. I shall attempt to examine the effects of these conditions upon training, and in the long run, upon the psychologist's role and identity.

Twenty years ago the economic circumstances of a student in psychology were, as a rule, tight to the point of penury. To the jobs that a student could attain there was unquestionably an accent on reward, although their pay scale was quite low. These positions were distinctions, tokens of successful involvement in the subject of psychology. The system expected of the student, first, that he be concerned with the subject matter for its own sake and attraction. He might, in turn, be rewarded on a material basis for having followed his ideals so diligently. The function of pay remained equivocal: it looked like regular wages for a clearly defined assignment such as the teaching of sections in elementary courses. Yet because of the prestige involved, it had at least as much the quality of a stipend. Similar standards applied to the career which the apprentice entered after completing his studies. Jobs in psychology were almost as limited as the income which they provided. Competition was keen, and choices again were made largely

on the basis of a reputation for successful involvement in the subject matter of psychology. Psychologists, as most other academic people, had to draw up their life plans in terms of limited economic prospects, and adopt a corresponding style of living. The absorbing concern with psychology, on the other hand, again was not without extraneous rewards. Involvement in psychology, beneath its personal and ideal gratifications, usually produced some entirely worldly ones too, such as income, status, and power. Yet one cannot fail to appreciate the self-contained motivation of many psychologists in this period, nor the fact that the role of the psychologist as it was then conceived had at its very core this kind of motivation.

In general one can say that the role of the psychologist differed from the present one in that it was more uniform. It was also more universal, or if you wish, mandatory. To be closely identified with this role was of its very essence. One might guess that the identity (in E. H. Erickson's sense) which this role provided was a more compelling and a more encompassing one. If this is true, it must have been a source of strength for the struggling psychologist.

The expansion of psychology toward its present professionalization was already under way when World War II began. The employment of psychologists proceeded on a much broader front than that of clinical psychology alone. New ideas had developed, of which psychoanalysis, gestalt, learning, and culture theories were the most important ones. These ideas affected to some extent all of psychology, and beyond psychology all of the social sciences. Concern with the management of personality disturbances and with the understanding of the hidden motives of personality (which psychoanalysis had recently brought into public awareness) led to a new interest in the theory, and especially, the techniques of psychology. The recruitment of psychology for the rapidly growing enterprise of mental hygiene led to the somewhat haphazard combination of aims and opportunities which now goes under the name of clinical psychology.

At any rate, the war emergency pushed psychology and all its sections into a broader and much more active social participation than it had ever known before. In terms of the number of jobs, as well as of publicity, clinical psychology was probably the most conspicuous aspect of psychology

in this expansion. In this case the new notoriety went abreast with that of psychiatry and social work, impelled by the growing consciousness and ubiquitous pressure of psychological disturbances in all aspects of life. When the war ended, there was no recess for psychology. Job opportunities continued and multiplied at an amazing pace.

With the growth of opportunities for clinical psychology, programs for training in the new specialty began to be developed at the universities. Less conspicuous than programs and manifestoes were the changes in the economics of psychology, although they may have done more to affect professional psychology. The scope of academic teaching grew with the increasing number of jobs and with the number of people who enrolled for professional training in clinical psychology. The provisions of the GI Bill enabled many to afford college and graduate education. A special training program for clinical psychology was set up by the Veterans Administration. The needs of VA installations for psychological personnel led to a training program of national scope and usefulness. The students of clinical psychology learned on the job (so the plan went) and would at the same time contribute on a journeyman's level to the psychological services of the VA hospitals and clinics where training was to be conducted. This program made it possible for a large number of students to go through the graduate study of clinical psychology under conditions of regular employment. Fellowships from the U.S. Public Health Service provided another source of funds for becoming a professional psychologist.

With the advent of the new program for clinical psychology, new skills, such as diagnostic techniques, were introduced into the curriculum while the essentials of psychology were taught as before, because it had been decided to maintain the character of psychology as an experimental science. Additional time was devoted to a practicum where the apprentice would learn to live and work with related professions in a variety of public agencies. These practicum centers were not always close at hand. The ecology of the Veterans Administration especially did not coincide with that of the universities. The student had to go back and forth between the university and distant training centers at much cost of time. He had to qualify himself in general psychology, and demonstrate his competence through a research dissertation like any

other psychologist. For a variety of reasons, the four-year schedule for the doctorate was maintained, and part-time employment with the VA closely geared to it.

The most general effect of professionalization therefore was a change in time perspective. Study became an unending rush to meet too many obligations in too many different places. The climate of professional preparation became one of collective pressure to meet the deadlines, a tired struggle to go through a prescribed curriculum without unnecessary delay. Worse than loss of standing, delay now meant loss of livelihood.

Any program of graduate study leading to a doctor's degree usually stipulates how many years, as a minimum, it will take to complete it. Especially in the nonprofessional fields of the sciences and humanities it is understood, at the same time, that the proficiency to which the program aspires must have its own subjective schedule of delays and achievements. The study of clinical psychology is now set up in such a way that the student will be able to cover it in the stipulated four years only with difficulty. One or the other, theory or practice, will be cut short. Learning to look at things in a new manner, which is really the essence of learning the theory and practice of any science, has apparently its own rate of growth which stands little crowding. It is safe to guess, then, that in the strain and stress of present-day clinical training the student can at best meet his subject but not absorb it.

On the other hand, commitment to a life plan which makes study a means for an income adds a powerful factor of time pressure. For with the change of opportunities, life plans and expectations changed, too. The student of clinical psychology now commonly enters his profession with the idea that he will be able to earn his way through graduate study. He will probably marry and start a family early. In this case he will have to make an income which, with the growth of his family, will also need to grow larger. The graduate period tends to merge now with the beginning of a professional career. This overlapping of two formerly separate segments of professional development makes for a confusion of roles; the student's idea of himself is rendered even more difficult by the divergence of two hierarchies-of a salaried employee and of a student of a scientific profession. The attitudes which result from these roles do not really go together, although the conflict is usually subdued and manifests itself mainly in the discomfiture and unsureness of role among students. In view of all this, it should not be surprising to anybody that the identity of the clinical psychologist is at present too complex for comfort—for himself as well as for others.

Professions are usually classified according to their major purpose or goal. It may be worth while for a moment to consider them with regard to prevalent types of motivation among their members. They can then be roughly arranged in a continuum according to the extent to which they tend to be ends in themselves, or a means to other ends. Motivation may be predominantly immanent, self-contained, and self-sufficient; or it may transcend its vocational subject and aim for other goals, among which the commonest obviously will be economic security and social status. Law is a good example of the latter; astronomy of the former.

The sudden increase of interest in the study of clinical psychology is customarily seen in direct relationship to the recent popular consciousness of adjustment and mental hygiene. Such a widespread concern, of course, suggests also the prospect of many job opportunities. In addition, clinical psychology is at present the only academic subject in which graduate study can be self-supporting. It seems plausible that this condition should affect the process of vocational choice. Clinical psychology in this sense is developing from an "ends" to a "means" profession. The characteristic relationship between the person and his subject changes in this process from the specific and personal to a more impersonal and instrumental one. One of the reasons for the apparent shift of typical motivations in psychology may, therefore, have to do with the increasing attraction to the field of students who see it as a vehicle of social mobility rather than a subject of autonomous interest.

Cultural tradition has defined training as a set of planned opportunities for learning what the student later on will offer as skill or competence against a salary or fee. Pay, on the other hand, is supposed to denote approximately the value of what has been offered for it. An established skill and a tested competence hence should fetch more pay than limited and untested aptitudes. Before the advent of clinical psychology the emphasis in the graduate study of psychology was on study even

when a form of employment was involved. It seems now that the aspect of employment is becoming increasingly more significant. Since the student enters the training program with the expectation, if not with definite commitments, to earn a living, it seems only natural that all kinds of practicum situations, in and outside the VA, are gradually becoming opportunities for income as much as for exploration and experience. Under the exigencies of an overcrowded schedule, any experience not prescribed by the program thus has to be considered in terms of pay: how much will it bring, or conversely, how much will it cost by not bringing as much as another place might?

Time is now a commodity in a twofold sense: how much of it has to be spent to complete studies and obtain a degree? And how much income can be made in the meantime in terms of wages for the practicum? Training in clinical psychology is being undertaken under the condition of an income. Most of the time that income is obviously a necessity. It follows that many students can no longer judge a practicum facility solely by what it will contribute to professional and intellectual growth, but must judge it to a considerable degree by what income it will provide. The pressure of the curriculum does not favor the kind of curiosity which leads to broad interests and a wide range of information. In fact, these goals become next to improbable if time has to be used for its economic rather than its intellectual utility. Paradoxically, a good deal of the exploration and specialization for which the graduate period was originally designed has a definite practical value for the subsequent career so that the present income, in terms of the cost of future advances, is in the end a poor bargain. Nevertheless, circumstances in clinical psychology seem to favor what may be designated as employee mentality.

It seems to me that these circumstances affect the student as much, if not more, than the good intentions of the training program, or the intellectual interests which made him join it in the beginning. Three major trends seem to emerge.

One has to do with the selection of students. Nothing definite is known as to whether the motivation of students who now try to become clinical psychologists has shifted with their increase in number; nor is there a clear idea in what way students differ, if they do, from the graduate students of psychology 20 or even only 10 years ago. It

would hardly do to pin it all on a single cause. There is, for instance, a good deal more psychology to attract a greater variety of interests than there was two decades ago. Thus clinical psychology may now draw people (or patterns of vocational motivation) who formerly would not have been attracted to a less differentiated psychology. Going by a widely spread impression, one cannot escape the conclusion, on the other hand, that the rising popular image of the clinical psychologist, the prospect of well-paid jobs, and the opportunity of obtaining professional training at no cost, with the opportunity of making an income quickly, have attracted many people to clinical psychology who at other times would have gone into other fields. As an inevitable consequence of the new professional status, the emphasis has shifted from being in psychology as an end in itself, to the occupation of clinical psychology as a means to status and in-

Besides the effect of role disparity on the identity of the clinical psychologist, the training program contains other concrete liabilities for the student of clinical psychology. Some of them are unavoidable once the goals of clinical psychology have been defined. The tension between the rigorously pragmatical orientation of medical and other service institutions and the emphasis on neutral inquiry and insight for its own sake, characteristic of graduate academic departments, is not only inherent, but in the end may turn out to be a healthy challenge for both sides. Other problems, such as the much more hierarchical organization of hospitals, especially when the psychologists find themselves relegated in this order to an "ancillary" service, an outgroup of decidedly uncertain status, probably affect unfavorably the professional and personal self-regard of psychologists.1

The problem is not that of professionalization which is inherent and inevitable from the start

¹ The problem is a much greater one, however. It involves not only the self-regard of people in both fields, but the rational use of psychological understanding before the public, and thus the ultimate success or failure of that endeavor. Hence either side falls gravely short of this responsibility if it insists on viewing the other in terms of some hypothetical status quo, of time-hardened misconceptions, and of the labile self-regard of a few people in either camp. The public will find it hard to believe in a rational approach to psychological problems if the groups who want to persuade people of it cannot settle their own relationships rationally.

for what clinical psychology set out to do. It seems to me rather that it lies in the confusing ambiguity of student and employee status at a time when the student has to fit himself into either, but in addition is subject to extraneous (economic, organizatory) pressures while he tries to work out his own role. The risks are then in the direction and rate of professionalization. Ultimately, the worth of clinical psychologists must show in their intellectual curiosity, in their alertness to the uncertainties of their subject, and in a broad attentive relationship to the progress of ideas in their parent sciences. Being an employee on hourly wages in a large bureaucratic system, the student (and perhaps, later on, the full-time employee) cannot help but fit himself into a framework where in a certain number of hours a certain amount of work has to be performed. Training for skills which apply to immediate needs may well take place under these conditions. As it is predominantly a work, rather than a learning situation, the emphasis will be on the facility with which certain useful and needed techniques, such as those of a limited number of diagnostic techniques, can be utilized. The very definition of the situation, however, makes it unfavorable to teaching a great variety and breadth of skills-let alone to searching for theory that should relate them to the principles of behavior. Curiosity and doubt, the mainsprings of investigation, are bound to interfere with the regular operation of a work schedule. They are simply uneconomical. Training under these circumstances is therefore bound to serve its own limited ends, and will tend to stress in the trainee the technician rather than the professional psychologist.

What the technician does, however, relates only to the present occasion and not to the principles which justify the technique. In other words, the continuous awareness of that relationship to an underlying theory determines the standing of a technique as a scientific method. The confusion of role discussed previously brings with it a confusion of quality. The former can be epitomized by saying that, as an employee, the student is paid in the afternoon for practicing the techniques which as a student he had been taught in the morning. That he gets paid, on the other hand, implies somehow that what he does must be worth the salary he receives. In conjunction with such factors as the newness and relative uncertainty of most of the procedures of clinical psychology, this situation has allowed for a good deal of obtuseness about the achievement of competence. "I am doing it for a professional purpose; I get paid for it: hence I must be competent," or so the reasoning seems to run.

I have made the assumption earlier that a vigorous relationship of inquiry and information is the first condition for the growth of sound professional psychology. The other is an unhesitating activism and pragmatism in the face of the social responsibility which the psychologist has taken upon himself. This applies especially to clinical psychology. Insistence on the scientific nature of the profession with research at its center, and methodological rigor as its foremost concern, has often tended to obscure and sidestep that fundamental necessity. The practicum in this sense not only serves the purpose of training, but has an even more basic function in building what I should like to call professional character. It is the consciousness of the social contingencies of a professional role, as well as an identification with that role capable of transforming the demands bound up in it into matter-of-fact spontaneity. If training continues under the pressures outlined before, it is only too likely that in the end both its systematic and practical proceeds will suffer. The problems of training, however, only forecast those of the established profession. The vast concerted effort of training programs is at best teaching students how to do clinical work. It has as yet not recognized its mandate to teach them also how to be professional psychologists. In counterdistinction to other older professions, however, professional psychology is not yet all established with a where and a what for, but is casting about for its proper intellectual dimensions and for its social place. If becoming a clinical psychologist is such a disparate undertaking, how will clinical psychologists later on know who they are and what they are doing when they represent the new profession?

Frequently it is argued that psychology, now that it has become a profession, should not impose its systematic and methodological fundamentals upon those of its students who want to become practitioners. Medicine is cited as an example of how science can remain alert and productive among a large number of medical practitioners who apply the composite results of research, but who neither know nor care how to do research themselves. This comparison is specious in more than one way. For

one, the history of medicine has been a much longer one, so that medicine has had the time to organize itself both as a science and as an elaborate guild of practitioners and scientists. Overlapping theoretical interests, as in abnormal psychology; practical concerns, as in rehabilitation; as well as the very real and very desirable coordination of the two professions in the face of social problems have extended the idea that the institution of medicine already contains the answer for the shape of professional psychology. Unlike medicine, however, psychology began as a theoretical science and turned into a profession relatively late in its history. While both have large areas in common, psychology still needs to work out its professionalization in its own way-which is why psychologists cannot gain from grafting bits of role from another field upon their own psychological foundations. If psychologists wish to make a contribution to the problems of conduct and adjustment, they will have to do so as social scientists.

In discussing some of the problems of the emergent profession of clinical psychology, I have heavily stressed its shortcomings and have treated as serious liabilities what in daily routine is no more than a rough spot and an intimation of a difficulty. There are always students, and fortunately quite a few of them, who make the best of the training program, and enter the field in a frame of mind which makes the professionalization of psychology appear as the great fruitful challenge which, of course, it is. I have not spoken about

that psychologists have been able in less than a decade to create a curriculum in which a great deal of intellectual synthesis has been realized; and the enormous stimulation which came from it for a new, significant interaction of fields and faculties which before had all been doing related things without knowing much of each other. Professional psychology may well have been, and may continue to be, a major catalyst in the new interdependence of all the sciences concerned with man, and of all the efforts designed to relieve the deepening problems of his social adaptation.

My aim has been to discuss some of the effects which present-day training in clinical psychology may have upon the role and identity of professional psychologists; how the consequences of professional expansion and the interaction with other groups affect training programs in psychology; and how in turn the circumstances of the latter, by determining the range and quality of experiences, may affect the intellectual and professional orientation of clinical psychologists. For the sake of further planning we should forego our sociological provincialism and examine methodically a variety of circumstances bearing upon professional psychology. The question for us, therefore, is not how to avoid the involvements of the world; but how we can make use of our opportunities with a greater awareness of their implications.

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SOME OBSERVATIONS ON THE IDEOLOGY OF PROFESSIONAL PSYCHOLOGISTS

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Since the close of World War II, interest has continuously grown among professional psychologists in the question whether or not social values are influencing scientific research and professional practice. This preoccupation, of course, centers among psychologists who define their discipline as a social science; these remarks, therefore, deal with psychology as it relates to the social sciences.

In the rediscovery of the "value question," psy-

chologists are demonstrating the same intense energy, individual honesty, and optimism that have characterized the recent rapid growth of their professional ranks. They are also demonstrating their characteristic intellectual freshness which may, in fact, be the source of a brand new approach to the age-old "philosopher-king" problem. Perhaps it is best that contemporary psychologists have not searched the literature or concerned themselves with the vast amount of previous philosophizing on

this topic. Nothing in the existing literature solves the central problems. The efforts of previous crucial thinkers from Plato to J. S. Mill do at least serve to remind the behavioral scientist that others have thought about similar problems. Their statements seem to formulate problems which have the perennial tendency to re-emerge.

In any case, what accounts for the recent interest of psychologists in the value question? Some explanation of this renewed interest seems to be a prerequisite to examining psychology as a special case in the general problem of the social limitations of scientific knowledge.

Re-examination of the value question in the social sciences is often linked to crucial theoretical advances. These are the advances or reformulations necessitated by the discovery that explicit or hidden value premises have resulted in defective conceptualization. Such was the process by which John Maynard Keynes reformulated classical economic theories on the basis of his socialist critique of free enterprise values. The value position of the social scientist thus became a positive contribution to scientific development. Current interest in the value question among psychologists does not seem to be of this origin or variety.

In the simplest terms, the recent political and international crises appear to have forced the psychologists into a revision of their former oblivion of the value question, and perhaps it is only the newer and younger generation of psychologists who express this concern. An explanation on another level can be offered; it relates to the ideology of psychologists. It is, of course, frankly speculative. For social groups, sudden preoccupation with the value question and with social responsibility implies either one of two conditions, or a combination of both: (a) a concern about past group behavior and the possibility of past positive sins; (b) a desire to achieve greater group influence coupled with a concern about the viability of group ethics and social responsibility under such conditions of increased influence.

As to past positive sins, psychologists as a professional group, with the possible exception of certain specialties whose performance is difficult to evaluate, can be said to have achieved a relatively clean bill of health. Foremost among the positive sins of which psychologists have been accused are the sins of manipulation of human beings on behalf of advertisers, employers, personnel managers, and

the like. Undoubtedly, there have been cases of antisocial behavior, for psychologists as a group cannot be expected to represent the collective conscience of the human species. Liberal journalists and the "hardheaded" school of social scientists, seeking to uncover plots and to understand the "realities of power," have made the most of these cases. However, the important point is that psychology is neither so well developed nor so effective as to supply such powerful aids to advertisers, employers, or managers. One has only to read a handful of the so-called "confidential" psychological reports. Most of what manipulation exists seems to be limited to the game of charging fees merely for repeating in technical language, and imprecisely, the common sense basis of operating procedures. There still remains a lack of sufficient evidence that in these areas professionally trained psychologists are any more efficient than practical operating personnel. On the basis of personal experience, I would state flatly that in the area of psychological warfare-which is neither psychological nor warfare—psychologists are by and large much less effective and influential than the practical specialist.

Current preoccupation of psychologists with the value question is mainly related, in my opinion, to the second source of concern—the problems that would be generated should psychology develop a body of systematic knowledge that had decisive capacity to influence human behavior. Whether motivated by a desire for such increased influence or a fear of the consequences, psychologists, like other social scientists, are becoming less and less reluctant to avoid this issue. Psychologists, like typical intellectuals in the United States, are deeply ambivalent in their predispositions toward the exercise of power. They are openly critical of those who exercise influence without the use of scientific knowledge; they entertain elaborate notions of their own potentials, but they seldom seek to enter directly into the struggle for power. The concern about the potentialities of psychology may explain in part why some first-rate psychologists returned to their laboratories after a brief liaison with government or industry during World War II. But now the value implications of psychology must be seen in the light of the tremendous expansion of the facilities for training professional psychologists who are explicitly seeking new social roles in the community.

Analysis of the value position of psychologists

starts with an examination of certain of the intellectual postulates and biases of modern psychology. These contribute to what I call the ideology of professional psychologists. They also assist in understanding the actual and potential influence of psychologists. Modern psychology derives its particular orientations in good measure from the social context of American life. The ideology of professional psychology, I shall argue, is linked to the antiphilosophical, antihistorical, narrowly meansoriented and optimistic character of much American thought and culture.

a. Modern psychologists tend to be antiphilosophical and rather unconcerned with the foundation problems of their discipline. The philosophical character of a discipline as opposed to its theoretical character involves both the assumptions that make possible the development of a body of knowledge and the limitations that must be imposed on that body of knowledge. Psychologists seem, in general, to be creating a body of knowledge on the basis of a rather naive empiricism, which in certain respects parallels the formal characteristics of crude logical positivism. Popular semantics might be a more apt designation of the philosophical assumptions of much of contemporary psychology.

As a result two important distortions tend to develop. First, this popular semantics approach is a most simplified affirmation of the arbitrary nature of science. Once the acknowledgment is made, it is in fact quickly forgotten, and the psychologist all too often becomes so involved in his verbal creations that he is not able to delimit scientific knowledge from reality. Scientific knowledge then becomes the same as reality and, indeed, a form of super-reality. Second, psychology has little to say explicitly about the relations between scientific knowledge and other types of social knowledge which have not attained scientific validity. There are not only the intuitive and creative insights which suddenly develop and crucially assist human understanding; there are also the operational bodies of understanding which guide practical men and which have powerful validity. It is naive and misleading to deal with this type of knowledge by merely asserting that ultimately formal scientific knowledge will encompass all of it.

Thus, failure to be concerned with the inherent limitations on psychological knowledge leads to a fantastic exaggeration of the potentialities of social science and to a caricature of the human being as an all-powerful social scientist.

It is difficult to understand the strong reluctance of psychologists to set limitations on scientific knowledge. Undoubtedly the high prestige of science in our society has emboldened them in their claims. This aspect of the social sciences reflects the anti-intraceptive character of contemporary American life. I feel that psychology assumes its pose of rampant positivism in part because it has not come to terms with the specific question of religious knowledge versus scientific knowledge, which is but another specific form of the same general question. The troubled emergence of psychological analysis from religious contexts and the large number of new psychologists still in active revolt against religion might well explain this orthodoxy toward science and the absence of concern with other dimensions of knowledge except to deny their relevance for social action. As a result, psychology appears to be both a scientific discipline and a social gospel, and it is difficult to know where one stops and the other starts.

b. Modern psychologists fail to achieve adequate comparative analysis because of their antihistorical orientation. But how does the historical dimension apply to psychology? Is it not the case that the genetic phases of individual development must suffice? To speak of history in connection with psychology, it might be argued, would not only present impossible problems of validation, but would completely pervert the scope and method of psychology.

To the contrary, the issue is simply that the generalizations which the social scientist is able to develop are related directly to the types of comparative observation he is able to perform. Value judgments are revealed by the selection of populations on which comparative analyses are made. Hopefully, psychologists have become restive of the limitations under which they have operated in this respect. Therefore, in order to enrich the powers of comparative analysis, they have sought to extend the horizontal range of their research by rushing headlong into the cross-cultural analysis offered by the anthropologists. These developments are undoubtedly meritorious, but they have happened because of a lack of historical perspective and do not substitute for a vertical perspective through time. The results have not only been a distortion of scientific knowledge, but also

a degeneration of the value question into the ethical relativism of cultural anthropology.

Cross-cultural anthropological data have many superficial attractions to the behavioral scientist. In particular, there is the security that arises from fifty or so tribes drawn at random, which permits the application of the chi-square test. But random sampling has given way in other areas of research to area probability sampling. For historical comparative purposes the cross-cultural samples must of necessity include the major industrialized areas of Western Europe out of which our society developed. Relative similarities in social structure would highlight and give greater meaning to the differences encountered in psychological research, for all psychological observations postulate some view of social structure.

Comparisons with the other industrialized societies which have been crucial in our historical development and which have interacted with our development supply a sounder basis for generalization and prediction. This is the first step in the development of a historical perspective for psychological research. Secondly, even the crudest time dimensions help to overcome distortions from an ideological preoccupation with the immediate present. Goldhamer and Marshall's data, for example, claim a stability of mental illness rates during the last one hundred years in areas of the United States, and thereby present a fundamental challenge to all who work in the area of psychopathology.

c. Modern psychologists tend to be narrowly means oriented. They have, consequently, an optimistic bias about the psychological potentialities for rapid change in human relations. This narrow means orientation has led to a wasteful preoccupation with bits of problems rather than with meaningful problems. Moreover, often, as in the case of personnel selection, it has led to concern with the wrong problem. For example, military selection procedures are only slowly moving toward the selection of soldiers rather than veterans.

American psychology bears the strong imprint of an intellectual reaction to Freudian theory, in which the foreign matter has been dealt with by partial incorporation. The view of mankind presented by Freud is indeed a gloomy picture, and the reaction to it has produced a markedly different end product. It is the psychology of the here and the now, of three-session psychotherapy, sentence completion tests, and the rapid attitude-change experiments. Such a psychology is a reflection of our engineering culture, of a rapidly changing social context where the laying on of more hands is believed to be able to solve all problems. I fear that many of our researches have been designed to reflect and to conform to these culture imperatives. Indeed, if human nature were as psychologically changeable as might be inferred from certain schools of contemporary psychology, then the social consequences of modern psychology would be most frightening and utterly dangerous.

The intellectual strength and limitations of modern psychology are manifested through the particular way in which psychology is organized as a profession. It is possible to analyze the drive toward professionalization in psychology; it is possible to note the source of funds for psychological research; to speak of the kinds of individuals who become psychologists, and to analyze the image the public holds of them. These factors and a host of others are important. But of all these factors, it is precisely the narrow means orientation of psychology -the concern with specific and immediate meansthat is decisive in evaluating the social consequences of psychology. It is this fact which helps explain why, despite the vigor, intellectual achievement, and resources of the profession, psychology has relatively low direct social influence. As a result, psychologists tend to have only rather indirect access to policy makers and public leaders; they are seldom involved in the formulation of policy and goals, but are merely employed as consultants, technicians, or custodians. respect, psychologists have suffered a retrogression from their earlier counterparts in the priesthood and ministry.

The ideology of psychologists has resulted in a failure of psychology to produce its own intellectual spokesmen. I am not speaking of popularizers, but of intellectual spokesmen oriented toward the other social scientific and humanistic disciplines, since discussion of the value question must of necessity proceed on an interdisciplinary basis. These are the spokesmen who are required to create a unity of learned discourse out of which the broader social dissemination of knowledge is possible. The major intellectual spokesmen for recent American psychology have not been professional psychologists: Veblen was an economist, Dewey a philosopher, and, more recently, Kinsey

a zoologist. To be concerned with the unity of learned discourse requires a broader definition of social means than scientific psychologists seem to employ.

The value question for psychologists ultimately implies concern for the misuse of psychological data by individuals other than professional psychologists. Here I am referring to popular psychology, particularly in the mass media, which seems to cause more confusion than positive harm. Psychologists cannot, of course, wash their hands of this problem, although a purely engineering mentality would hinder the acceptance of such responsibility. Likewise, they need not feel that they have complete responsibility for this burden. The psychological profession ought to develop to the point where its members feel that they have exercised reasonable initiative. There are many organizational devices which this lively profession is developing and could develop.

Probably as fundamental is the intellectual task of overcoming the antiphilosophical, antihistorical, narrow means orientation inherent in psychology. This would help the psychologist to be more realistic about his role as a scientist and a citizen. The scientific method, contrary to some traditions of psychology, remains unspoiled and in fact becomes more effective when the social scientist realizes that the value assumptions that guide his technical research and the value assumptions that guide him as a public citizen ought to be part of the same whole.

All the evidence from history, and in particular from modern totalitarianism, shows clearly that in the absence of the study of human relations by the scientific method, human exploitation and manipulation run rampant. The charges that the social scientists per se are the new manipulators seem to be utter nonsense when we observe the fate of social science under the Nazis and Marxists. I am convinced that the efforts of social scientists, if they are constantly mindful of the inherent limitations and biases in scientific knowledge, will serve to enhance the dignity of mankind by clarifying the fundamental nature of human nature.

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THE VALUE CONTEXT OF PSYCHOLOGY

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HE social values of psychologists and the development of the profession involve the values of other professions and of the public. These values provide areas of competition as well as of support for psychologists. The current interest of many psychologists in doing psychotherapy highlights the way in which the values of the environing society may operate to implement or deflect the goals of psychology. Some inquiry into the values involving the psychotherapeutic complex may, if we are free to be somewhat speculative, permit us to envision some of the possible resultants of psychology's future course. I believe that observing the professional development of psychology in such hypothetical terms is a fruitful means of isolating areas needing empiric research. Perhaps I might best refer to this paper as a partial review of the reality contingencies of the values of psychology.

Psychology is, of course, caught up in the drive toward professionalization that affects a wide range of occupations in our modern world. It is one among many disciplines currently engaging in the elaboration of standards and the prescription of forms of behavior which are defined, and highly valued, as "professional." This drive for professionalization is in part a means of effecting the technical task of an occupation more adequately. It is also valued as an end in itself.

It is a "good thing" to be a professional in our society. Prestige connotations of the designation are high. One may note that this concern with being a professional may be viewed as an aspect of the social mobility of an occupation—an external sign of its striving to reach a favored place in a ranked system of occupations. It is a phase during which professional strains result from the changes and conflicts involving professional self-images and

public-images. Members of the occupation become self-conscious, sensitive to status slights, and insistent upon their "rights." Inner stresses and conflicts with outsiders are the rule.

This process of professional social mobility needs to be looked at more closely. Research in industry has shown that as workers of less prestigeful categories begin to rise in the work hierarchy, by securing jobs which are highly valued, they may find themselves on a kind of treadmill. Jobs are devalued as fast as they are able to secure them. Thus, the Negro, or the woman, who finally succeeds in securing a coveted job at a particular kind of skilled machine finds that the prestige gains are fleeting. The new job has been relinquished by the more prestigeful workers and redefined as woman's work or a job for Negroes. Extending this experience to our interest in the professions one may postulate a form of dialectic. As psychology becomes increasingly professionalized it may be used more effectively, and more frequently, as a ladder of social mobility by professional aspirants who devalue the ladder in the course of using it successfully. The resultant may be that its position in the hierarchy of the professions will afford less prestige than the aspirants hope for. Perhaps it needs to be stressed that there is indeed a hierarchy of professions. Because of this it is not enough for psychology to be concerned only with becoming a profession. It may be required more actively to concern itself with becoming one or another kind of profession.

The kind of profession psychology becomes crucially involves the particular skills (ideas or techniques) around which professionalization is developed. In the orientation toward psychotherapy this is of particular importance. Several other groups of professionals and professional aspirants (i.e., social workers) share the ideas and techniques of psychotherapy. If psychotherapy is shared with other occupations and is distinctive to none, is it then a feasible basis of professionalization? Are there other skills, more specifically "psychological," which might provide a better basis of professional specialization and demarcation? Then there is always the critically important question of what kind of psychotherapy? Which techniques? Whose system? The conflicts endemic among the psychotherapies could be a potent source of confusion to psychology if it professionalized around this area of skill.

An increased emphasis upon psychotherapy also brings psychology squarely into conflict with medicine and psychiatry. Here the medical values of American psychiatry are of peculiar importance and the idea of lay psychotherapy a particular threat to psychiatry. One of the distinctive features of psychiatry in the United States, including psychoanalytic psychiatry, is its drive-an increasingly successful and effective one-toward integration with medicine. Psychiatry wants to be known as a medical specialty, with a monopoly on psychotherapy. It also wants to be known as a basic medical science (of medical psychology). Both scientifically and therapeutically it is strongly oriented toward medicine. It is a great threat to this value orientation that psychology and psychotherapy are not intrinsically medical and that both have received important development outside of medicine. This is also an increasing threat. The older lay analysts were largely a "maverick" group who secured their training on an individual basis and often in the most devious of fashions. These lay analysts are perhaps a vanishing breed. But the new lay psychotherapist is apt to be a member of an organized profession who has taken some analytic training as part of a prescribed and conventionalized course of training. The number of such therapists, recruited largely from psychology and social work, is growing rapidly. So is medicalpsychiatric alarm. And so are the negative sanctions of medicine and psychiatry.

Despite its increasing integration with medicine, psychiatry remains very much of a minority group, an "outsider," within medicine. This is a source of much anxiety to the field and underlies much of its defensive behavior. It is in this sphere that it may feel threatened by the increasing emphasis upon psychotherapy within psychology. But it must never be forgotten that it is nevertheless a medical outsider and has been able to receive strong support from organized medicine in its fight against lay psychotherapy. If it should come to a "war" between the organized professions, psychiatry might prove to be an unbeatable opponent for psychology. The defeats met by psychologists in their attempts to secure licensing legislation attest to this.

There may also be the danger that psychology may become established as an adjunct profession in the field of psychotherapy—subordinated to the medical professionals. Much of the medical psychology used by psychiatry lies in the area of com-

petence of academic psychology, but where psychology enters the clinic to engage in therapy it operates within the "culture" (values, sets of expectations, on the part of client if not also of practitioner) of medical behavior. Certainly many lay ideas and techniques are used in psychotherapy, but this has been defined as an area of "healing" behavior "assigned" to medicine. Medical and psychiatric professional tasks and behavior have set the stage upon which psychology now enters as a new player. Psychology has the task of actively redefining these tasks away from those of physicianpatient to those of psychologist-client. It insists that the case being dealt with is not necessarily a patient who is ill and needs to be made well, but rather a client with adjustment difficulties who may need guidance, counseling, psychological readjustment, or re-education. But changing definitions by fiat does not necessarily change the nature of the relationship. Many physicians insist that regardless of the terms used by psychologists they are doing therapy. Perhaps they are right. Medicine is willing for psychology to operate in this area, but at a price-submission to medical values and subordination to medical authority. For some psychologists this has already been the price of psychotherapy-medicine is prepared to make this generally so.

There is already some functional subordination. Psychologists in psychotherapy are tending to move into psychiatric gaps—areas of need left untended by psychiatrists. Difficult cases, lesser fees, patients with less prestige have been their lot. Such cases may not include many of the criteria for professional success—which is among the reasons for their avoidance by psychiatry. But the same criteria of success may be (or may become) valued as highly by psychologists as by psychiatrists. Psychologists are subordinated to medical psychiatry in taking "unwanted" cases. If these cases fail to offer crucial professional satisfactions a situation of built-in chronic discontent may result for psychologists as second-class professionals.

Further conflicts between psychology and the values of medicine focus on the lack of understanding between research workers and clinicians. Psychologists deplore the lack of scientific method in the evaluations psychiatrists often make of their own work. Some years ago at a meeting a psychologist told this to an assembly of psychiatrists. He took them to task for failing to use "controls."

He suggested that they should seek for matching controls for their patients to study the effects of their treatment. He acknowledged the difficulty of securing controls for patients and suggested that the process be reversed—that suitable control groups be selected and that patients be chosen accordingly. Psychiatric reaction was, of course, adverse.

Many psychiatrists have stated that the research training of psychologists contraindicates a therapeutic career. In its extreme terms this is stated in the form that research is sublimated hostility and that persons trained to do research lack a suitable "helping" therapeutic orientation. To what extent are "helping" and research incompatible? Social workers have found it difficult to combine the two. Would different "kinds" of psychologists, oriented toward research or therapy, have drastically different value foci? If so, what would this mean for the profession? An internal chasm might develop as broad as the one psychiatry now sees between itself and psychology. And if psychologists agree that the therapeutic orientation is a new and different one for their field, this may have important effects on the profession's self concept, and on the public image of the profession. The swing toward a therapeutic orientation might bring some psychologists closer to the values of medicine than to those of colleagues in their own profession.

The value system of the public is also strongly involved in psychology's professional fate. Attempts to survey the public's definitions of the various professions doing psychotherapy have revealed gross confusion and overlapping of ideas about function. Redlich found that there was no clear mandate from the people for psychiatry to care for their emotional ills. It is important here to note that the mandate from the public was equally unclear and confused so far as psychology was concerned. Steiner reported upon a whole range of practitioners, therapists, quacks, rogues, and charlatans who are blindly turned to by the public for help. There is clearly a growing recognition by the public of the need for and the acceptance of psychotherapy, but this has not been followed by an equally clear acceptance of any one profession to administer such therapy. Psychiatry has for some years been engaging in a complex and arduous task of public relations in the attempt to help the public define its emotional therapeutic needs and to translate these needs into an active demand for

psychiatric care. May not psychology be faced with a similar task? Plus the added one of countering medical propaganda? And how will this affect the as yet academically oriented value system of psychology?

The values of clients, actual and potential, are also of direct concern to psychology in the area of psychotherapy. These appear both to favor and hinder psychologists. They are favored in that psychologists are free of the adverse stereotypes which continue to plague psychiatrists. Indeed, there is some evidence that physicians in small towns prefer sending their patients to psychologists rather than to psychiatrists for therapy since in this way the stigma of being treated by a specialist in "insane people" may be avoided.

But since one's physician may be an item in one's standard of living, the prestige of the professional consulted is often of direct concern to the client. Here the "doctor"—the MD physician—has an advantaged place in the value system of many patients. This may be doubly a problem for the psychologist since many professionals also achieve important satisfactions from the attraction of increasingly prestigeful patients. If, at a certain point in the prestige scale of patients they turn to the medical professional rather then to the layman, regardless of skill, another kind of professional truncation might result for psychology. This is of particular importance since recent studies are showing that the acceptance of and demand for psychotherapy are increasingly marked as the social scale is ascended. Will the most therapeutically informed patients use psychologists freely? Or will psychologists find themselves limited to the performance of "poor man's psychiatry" among patients less eager for the ministrations of psychotherapists?

Historical social values that may be in process of change are also involved. As with other institutional forms they are subject to revision in times of crisis. The field of psychotherapy is now an area of crisis. The effects of the psychiatric casualties of two major wars have been to force the recognition of the extent and actuality of emotional illness in our society. The popularization of Freudian psychoanalysis has had a similar powerful effect. The educational efforts of psychiatry and the very presence and operations of its practitioners have similarly sensitized many people. The recent and dramatic development of psychotherapy with

"normal" people-the ambulatory everyday neurotic instead of the psychotic kept in custody—has involved growing numbers of people in the web of therapy. Statistical projections have indicated the enormous need in our society for mental health care. The rapid conversion of some of this need into an effective want has produced part of the crisis in therapy. The consequent shortage of trained personnel to deal with the growing mental health problem provides another aspect of the crisis. There is also the fact that persons with relevant skills are located in a variety of professions-among them medicine, the ministry, social work, and psychology. All of these professions, under a variety of designations, are engaged in direct psychotherapy or in work intimately related The recent war brought about a final leaven of crisis. It often permitted people to perform functions for which they were fitted by training despite the accidents of professional designation. The changed functions of many professions during the war challenged historical values and may be helping to remold them. Psychology was among the occupations provided the chance to expand into new functional possibilities in performing psychotherapy. In the VA it often continues its war role unhampered. It now wants to change the historical values concerning the proper place of each profession in the broader peacetime world. Crisis may favor its efforts.

The psychotherapeutic complex may perhaps best be envisioned as an arena of competing institutions in process. The established ("final") place of each depends in part upon developments in the others. The frontiers among them are not yet clearly marked nor severally assigned. Rather, the situation is hazy and confused. Different occupations are sharing tasks which some are seeking to monopolize as part of their own professionalizing drive. Both medical and nonmedical institutions are responding to the same contingencies of community mental and emotional health.

It follows therefore that those who are guiding the growth and development of psychology require the fullest knowledge not only of intrinsic professional developments but also of developments in the institutional complex within which psychology is defining its place. Some of the orders of problems relevant to this area of inquiry have been raised here.

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FREEDOM AND THE COGNITIVE NEED

(Address at Special Convocation, McGill University, June 11, 1954)

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T is a great honor to have been invited to address you tonight; but I am not going to impose upon you. My talk will be brief.

An occasion such as this-a Convocation of a Great University in a great and intellectually free country, where scholars have gathered from many lands—testifies once again to the fact that science. reason, and the life of the mind are, and shall remain, international. There are no boundaries, national or otherwise, which can separate truth from truth. We "eggheads," to repeat an appellation meant to be opprobrious (but not perhaps inappropriate), pledge ourselves, each according to his talents, to seek, to investigate, and to report. It is by this pledge and its resultant commitments that each of us, insofar as he can, seeks to make his contribution to the general welfare. But we do this in all modesty. For what is truth today may prove but half truth tomorrow. But even such half truths are better than none-better than prejudice, better than hearsay, better than rumor, and better than the blind self-seeking in which we all indulge in our lower moments.

Especially crucial among the truths which we scholars and scientists search for are those of psychology and of the other social sciences. But it is these psychological and sociological truths or, it may be, only half truths which perhaps most often come into conflict with the prejudices and selfseeking of everyday men. If I were a dictator, I would banish psychology and its sister sciences. For psychology and sociology and anthropology and economics and political science, even though as yet still in their infancies, have already acquired enough truth to make men poor fodder for dictators. The truths which have been found are already forcing us out of our stereotyped, ethnocentric, jingoistic, and dangerous ways-ways which prove such a good soil for dictators to build upon.

But, you may ask, what can I, as primarily a rat psychologist who has spent most of his working hours observing how rats learn mazes or reading about how rhesus monkeys or chimpanzees learn more complicated mechanisms, what can I contribute in the way of useful or sound conclusions as to how real human beings solve real human problems. My answer is that I think there are certain fundamental features of rat behavior and of monkey and chimpanzee behavior which throw very considerable light upon how we human beings meet our problems.

It has been found, for example, that nonhungry rats learn best the "truth" that there is food in a given alley of a maze if they are not at the same time too thirsty or too frightened or too something else. Further, as has just recently been reported from the psychological laboratories here at McGill, rats will notice and investigate a new visual pattern even when they have no known practical motives for doing so and have food and water already at hand. Also it has been found that monkeys and chimpanzees will learn to operate quite complicated mechanical devices for what appears to be the mere cognitive pleasure of doing so. There are many such findings which suggest the operation of something like a pure cognitive or curiosity need in animals and also findings which indicate the nature of the dependence or the independence of this pure cognitive drive upon such more practical wants as thirst, hunger, sex, fear. Furthermore, we, or at any rate I, see these facts and relationships about cognitive needs more clearly when they have been observed in rats or apes than when they have been merely noted in a common-sense way in human beings.

I shall advance two main propositions. (a) I shall claim that all new discrimination, new learning, or new problem solving requires, if it is to occur, the activity then and there of a pure cognitive or curiosity want to discriminate, to note, to see relationships. (b) I shall also claim that the arousal of such a pure cognitive want at any given time will be dependent in several different ways upon the governing practical needs which may then also be present. And I shall present first three such types of dependence.

a. Any active, practical need or want such, for example, as that to get to food (when the animal is hungry) will, up to a certain intensity,

tend to facilitate the arousal of a cognitive need or readiness relative to food itself and relative to such other objects as may prove means or paths for getting to the food. That is to say, a somewhat hungry rat is more apt to notice food and to discriminate the correct path to it than is a completely food-satiated rat, although, as we saw above, a completely nonhungry rat can under some conditions observe the presence of food in a maze alley and later remember where it was. And we also saw that completely nonhungry and nonthirsty rats will note the differences between visual patterns merely out of what would appear to be pure, disinterested curiosity. Nevertheless some moderate degree of practical needs such as hunger or thirst will, I believe, usually tend to increase the pure curiosity need.

b. When, however, a given practical need becomes too strong, too intense, the necessary, purely cognitive or curiosity want for observing and noting relationships seems to become less again. Thus, there is evidence that the very hungry rat is poorer about discovering the route to food than is the moderately hungry one.

c. Finally, when a given practical need is very strong, not only does it tend to interfere with cognitive curiosity for the finer details of the situation which would be relevant to this practical need itself, but such a very strong practical need also tends to interfere with any cognitive curiosity relative to other, perhaps then-and-there irrelevant features of the situation. Thus it was noted above that rats apparently did not note the presence or position of food when they were too thirsty.

Now let me suggest some human parallels. Suppose an individual, say a college professor, has been invited to make an address at a public meeting, perhaps a university convocation. What is his dominant practical need? I shall suppose (merely for the sake of argument) that his main need is a thirst for approval. That is, his immediate practical goal is that of writing a good speech because it will lead him to drink from the waters of approval, whether these waters be provided by himself or by his audience.

My first proposition, you will recall, was that all new learning or problem solving requires the arousal, at the time it takes place, of a pure cognitive or curiosity need (let us call it now the "truth" need) to discriminate, to note, and to observe relationships. In other words, this hypo-

thetical professor will require at the time he is writing his speech the arousal of some pure cognitive or truth want if he is to discriminate his ideas objectively and to see the true relationships between them.

My second proposition was that the activation of this truth want will depend in three different ways upon any aroused practical need. (a) It was asserted that a moderately strong practical need would be better for releasing the pure truth want resulting in good discrimination and in the seeing of relationships than would no practical need at all. That is, if our professor were not motivated at all by the practical desire to make a good speech, he would do less cognizing, less noticing of the true relationships than if reasonably motivated to obtain approval. (b) It was also asserted that, if the dominating practical need were too strong, the pure cognitive need or readiness would become less. Our professor, if he were too motivated, too ambitious, too concerned about his own or the audience's reaction, would exhibit less pure truth seeking and would tend more to miss and slur over the finer distinctions, the true relationships, between his ideas than if he were only reasonably motivated. (This may well have been the case in the actual instance I have in mind.) (c) It was asserted thirdly that the presence of any overly strong practical need would interfere with the pure cognitive or truth want relative to other features of the situation not at the moment specifically related to the task at hand. The professor, if overmotivated, would become blind to other features of the total situation, such perhaps as notes on his calendar which should have reminded him of important engagements.

But now finally in order to give a complete account of our hypothetical professor we must assume a couple of still further principles. Suppose that, in addition to having a need to write a good speech, he is also driven by two other strong practical needs—a need to support his family and a need not to be rejected by his fellows. Suppose, in short, that he has a strong fear that his family may starve and a strong fear that what he says will lead him into conflict with the current climate of opinion. What will happen? Such strong fear needs will also decrease his pure cognitive appraisal of the ideas to be put into his speech. He will write a cautious, timid speech. In short, his fears will add another goal to his writing, and to achieve

this secondary goal of playing safe his speech will be poorer and less objective. And as an aside I would also suggest that all his other activities will be similarly affected. He will not only write a poorer speech, but he will also become a poorer, more timid teacher, a blind type of research worker, and a neurotic committeeman. He will tend to fall down in all his activities. What I am saying is, in short, that any teacher, if he is to be what our liberal society "says" it wants him to be—namely, an open-minded, objective proponent of, and searcher for, truth—must then not be subjected to too strong economic fears or too strong social attacks.

And this, of course, is why we educators proclaim aloud the principles of Academic Freedom and Academic Tenure. Academic Freedom and its sister concept of Academic Tenure assert that if teachers are to think and teach freely, objectively, and critically, they must have reasonable economic security and a sturdy protection against temporary public pressures and public clamor. We teachers will not do our jobs well whenever we are made into wee, cowering, timorous beasties.

But this is, of course, only one side of the matter. If society is to grant us this somewhat specially privileged position, then we ourselves must take care not to abuse that position. Society must demand that each of us work and think and teach to the best of his ability. And it must also demand that, having so worked and thought and taught, we shall speak out and freely criticize only when in our considered opinion it is our duty to do so. In an ideal liberal society such procedures would be a matter of course. But, alas, we do not have an ideal society nor do we have ideal teachers.

What then are the characteristics of our actual society as we do have it today? Above all I would emphasize the rising tide of anti-intellectualism. This is due, I believe, to the fact that men today (and this means you and me and all of us, whether we dwell this side or that side of the iron or bamboo curtains) are largely dominated by fear. And when men are so dominated, a still additional psychological mechanism comes into play. This is the process known as scapegoating. As to this process, I have not learned much from rats or

chimpanzees. The lower animals do not, to my knowledge, go in for scapegoating. But we human beings do (and I may say in passing it is one of our most disgusting and dangerous traits). When we are too afraid or too angry (usually a mixture of both), we want to take it out on somebody else. We want to believe that mother, father, teacher is to blame. In such moments we assert that it is the intellectuals, the scientists, who are doing us in. So we seek to attack and to destroy them. We say let's investigate them. Let's damn them as "eggheads." Let's prevent them from talking and continue in our good, old-fashioned, uninformed, selfish, jingoistic ways. Let us reject these leaders who try to make us think, close our eyes, and forget that we are headed for Armageddon.

What can be done? How can we mere mortals combat this terrible danger, this great divisiveness among us? How can society be made survive? Perhaps it cannot. But I think it can. For there is one still additional psychological mechanism which will work for us. It has been shown that if a human organism wants some positive goal and wants it passionately enough, then, though fear will get in the way and tend to narrow his cognitive functionings, will tend to lead him into distorted, narrowed perception and into scapegoating, such fear and scapegoating will not wholly prevail. Even rats will learn (and sometimes faster) how to get to food when there are fearful electric shocks along the way. Hence, if our need as human beings for a liberal society be passionate enough, if our demands for freedom, for fair play, for honesty, for open minds, and for simple human decency really be overwhelming (and basically I believe they are), then whatever our fears and distorting mechanisms we men will continue to seek the truth. Our liberal schools and colleges will survive, in spite of the recurring attacks upon them. They shall be neither Communized nor Nazified. For I assert that we, the people, all of us, intellectuals, and nonintellectuals alike, still want the truth and nothing but the truth.

For in our hearts the words of the Nazarene still echo: "And ye shall know the truth, and the truth shall make you free."

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THE PROPER CONCERN OF EDUCATIONAL PSYCHOLOGISTS

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'N the last few years various individuals and groups interested in education and psychology have expressed concern about the present condition and possible future of the field of educational psychology. The Executive Committee of the National Society of College Teachers of Education, for example, appointed a committee in 1947 to recommend the content, sequence, organization, and teaching procedures for courses in educational psychology. This committee published five general reports, made up of 28 papers dealing with various aspects of the problems in this field (13, 29). Also in 1947, the Policy and Planning Board of the American Psychological Association expressed the belief that the prestige of educational psychology and its contribution to professional education had diminished rather than increased in recent years (28). In 1948 the Division of Educational Psychology of the APA appointed a committee to consider the function of this division and its relation to the other divisions of the Association. The report of this committee was published the following year (31). In 1949 the APA division appointed a committee to investigate the present status of teacher training in educational psychology. The report of this committee was published in 1952 (34).

Some of these reports state clear objectives and constructive suggestions for achieving them; others essentially plead for some means of bolstering the weak areas in the present structure of educational psychology in order to prevent its collapse. But they all reflect rather consistent agreement on the general disorder currently present in educational psychology, and attempt to affirm the importance of this field and to justify its existence. Incidentally, some of the reports also observed that, because of the general condition of this field, some institutions have abandoned the course in educational psychology and replaced it with others having such titles as "child psychology" or "human growth and development," and that the course might be abandoned in more institutions if it were not required for teacher certification.

Taken together these reports, along with other similar statements, typically place major emphasis on various "problems" in the field which are in need of "solution," such as the need to achieve agreement in the content and treatment of the subject matter in introductory texts (e.g., 3, 5, 9, 11, 18, 38). The degree of agreement among introductory texts is suggested by an intraclass correlation of .46 (25), which is based on a sample of five texts published in 1948 and rated on 25 subject matter categories (5).1 Concern was also frequently expressed over the present programs of training for educational psychologists and teachers (e.g., 4, 18, 34, 38). An approximate description of many current training programs in educational psychology seems to be that instructors with widely diverse (and often inadequate) backgrounds are permitted to teach the courses (cf. 40), using equally diverse methods of instruction (cf. 1) in equally diverse training programs (cf. 12).2

The reports paid relatively little attention to the importance of educational psychologists' developing theories and engaging in systematic research programs on problems pertaining to general theories of socialization, personality development, motivation, learning, thinking, or other key aspects of the educative process. It thus seems fitting to question whether or not misplaced emphasis might exist in these reports with respect to the core of the difficulty with educational psychology today.

Perhaps a brief glance at the early history of the field will help us to appraise its present condition. Many of the men who played a vital role in the development of psychology in this country were also interested in, and contributed directly to, educational theory and research. By 1900, for example, James had published his *Talks to Teachers*,

¹ See also an analysis of one text over several editions (19) and observations on the similarity of introductory texts in educational psychology to those in general, child, and social psychology (39).

² In various institutions, however, training programs are being developed which attempt to integrate the content, method, and problem aspects of this field (cf. 32).

Dewey had founded the first experimental elementary school at the University of Chicago, Cattell had laid the foundation for the study of individual differences, and Hall had founded *Pedagogical Seminary*, a publication devoted to research in child development; all four had served as president of the APA. During the next two or three decades persons interested in educational psychology led in the development of such areas as learning, developmental processes, emotion, personality, motivation, heredity and environment, and individual differences, especially as revealed by mental tests (cf. 8, p. 569).

The outstanding educational psychologist in this era was, of course, Thorndike. And, like many others of his time, he attempted to apply his conception of the scientific method to the study of the problems he considered important to the educative process. He developed methods to investigate such problems and theories to explain his findings, and he modified his methods and theories as new findings required it. In a brief autobiography, Thorndike said. "I have made somewhat laborious researches on mental inheritance, individual and sex differences, memory, work, fatigue, interest, the interrelations of abilities, the organization of intellect, and other topics in educational psychology, because in each case the matter seemed important for theory or practice or both. . . . In the actual work of advancing knowledge of human nature . . . we may pose a question that we know is important and then do our best to get facts to answer it" (37, pp. 4, 5, 8).

Perhaps the reason for the vitality and productivity of the early educational psychologists lies in the fact that they did vigorously engage in theoretical and research activities.

In the last decade or two, however, many educational psychologists seem to have lost the knack of carrying out systematic investigations on the important problems of their field. Perhaps they have lacked the necessary training in research methodology, or have taken too seriously the artificial dichotomy between pure research and the technology of application, or have become too involved with other duties. But for whatever reason, they seem to have said too easily and too often to their colleagues in general psychology and related fields, "Very well, you do the fundamental research and

develop the theories, and we will interpret and apply them to the classroom."

This is not to say that educational psychologists have ceased to do research. But too many of them seem to have been fixated on repeating the experiments of Thorndike and others, or on studying fragmented problems, or doing technique-centered research. Probably their best work has been on the methods of instruction in various subject matters, such as learning arithmetic or reading, and in certain techniques of measurement. But no systematic body of integrated theory and fact on the wide range of problems that are of fundamental importance to the field has grown out of the research programs of educational psychologists.

A recent summary of research in educational psychology is typical. It concludes with the observation that "Critics from within [the field] note that the work is not systematized; instead, it is characterized by somewhat uncoordinated efforts to measure and investigate all aspects of an astonishingly complex field of behavior. Too frequently for comfort it is necessary to point out that findings are tentative, rather than conclusive. The many fragmentary contributions are acceptable as sources of insight, but a need is felt for isolation of crucial problems and persistent research of a more penetrating and comprehensive character" (10, p. 406). Other recent summaries of research make essentially the same point (cf. 14, 17, 33).

It is the belief of the present writer that the core of the problem in educational psychology to-day, and the one most in need of attention, is failure of many persons to do their own basic research, and, secondarily, their willingness to take at face value the facts and theories from other disciplines so long as they appear on the surface to be relevant to the educative process. Thus, since they have lacked a systematic body of content based on their own work and on the problems of their field, educational psychologists have often been forced to pick and choose among the many—and often contradictory—offerings from other sources.

The reliance on hand-me-downs has frequently led to superficiality and the cluttering up of text-books with irrelevant "facts," to misstatements or distortion of theories and findings, and to unwarranted application of them to educational situations. On this point Blair reported in 1948 that "certain fairly recent textbooks and syllabuses, for example, discuss at length such topics as the mi-

³ Now the Journal of Genetic Psychology.

croscopic features of the nervous system, visceral processes, the synapse theory of learning, the neural basis of imagination, the Müller-Lyer Illusion, and the ergograph test" (3, p. 31). Similarly, Coghill's work on the salamander has been cited to "validate" the theory that pupils should learn the general overview before the specific details. But regardless of the validity of this generalization, it would be as possible, and as irrelevant, to cite studies showing highly developed responses in neonates to buttress the opposite theory. Under such conditions it is not surprising to find expressions of dissatisfaction with many of the present introductory texts and training programs.

But what constructive steps can be taken to clear up the "problems" that have been described by educational psychologists? On the basis of the above analysis of some of the factors that have led to the present condition, three interrelated steps should be taken.

1. Educational psychologists should determine the central problems, or problem areas, that might serve as integrating foci for developing the conceptual frameworks, methodologies, and research programs appropriate for a solid theoretical and practicable educational psychology.

The central or basic problems should center around the phenomena involved in the educative process which seem of greatest importance or most in need of understanding, regardless of traditional formulations. Fundamental advances in knowledge (whether "science" or "technology") always follow observation of the "laws of behavior" that exist intrinsically in the phenomena to be investigated. The investigator's task is to discover and study these laws. The simplest and probably most effective way to grasp the "laws of behavior" involved in the educative process is to utilize one's accumulated insights from experience and to observe good and poor teachers as they teach and learners as they learn. This is sometimes difficult to do because of our habitual or preconceived ways of observing. But such habits may be overcome in part by using other available methods of observing, such as clinical techniques or participant-observer reports.

Individuals and groups will, of course, differ in what they consider to be of central importance. Possible integrating foci may range from the dynamics of the instructional, communication, or learning processes—to the learner as a growing

person—to teacher-pupil interactions—or to the classroom as a total planned learning situation. The problem areas should, however, be defined in terms of realistic educational situations, so that they may be amenable to observation and experimentation, and so that the findings may eventually have maximal applicability to educational practice.

2. Educational psychologists should master and integrate the key theories, methodologies, and findings developed in the various related behavioral sciences in recent years, so that they may be brought to bear in formulating and carrying out investigations of the central problems or problem areas.

In the last two or three decades the range of approaches that may be applied to the study of the educative process has been greatly increased by contributions from various related disciplines dealing with the behavior of human beings, as individuals or as groups. Thus, insights and knowledge developed in such fields as child psychiatry and social anthropology may be as relevant to the problems in educational psychology as those from comparative and general psychology. Utilization of such contributions should help educational psychologists to state their central problems, and to study them more effectively.

3. The third step is crucial and involves two interdependent activities: educational psychologists should (a) develop theories of behavior to conceptualize the central problems, and (b) should conduct research programs to test, refine, and extend such formulations, either by themselves or in collaboration with other behavior scientists.

Productive research cannot be done in a theoretical vacuum, and the methods of investigation must be appropriate to the processes or phenomena being studied. But since existing theoretical formulations, and hence the methodologies employed, may be inadequate in these respects, it may be necessary for educational psychologists to take a hand in developing new approaches.

The present status of learning theory may be taken as a case in point. The theories developed to date are not very useful to educators in their attempt to understand and deal with the complexities of most educational situations. Most learning theorists still seem to think of their subjects as physicalistic machines which should display an invariant relation between input (stimulus) and output (response) variables. In such schemes learn-

ing tends to be thought of as a function of what the experimenter does, rather than what the subject already knows, or is interested in, or thinks and feels about the learning experience or the material to be learned. Consequently, learning has usually been defined as the modification of the relations between rather discrete stimuli and responses, or as the modification of response systems resulting from after-the-fact events (rewards or punishments) which presumably determine such modifications. It is generally agreed that our present theories of learning stem from, or are reactions against, Thorndike's views (cf. 27, p. 19). The more extreme opinion has also been expressed that "within the past two decades there have been no major innovations in basic learning theory, but many investigators have vigorously pursued the implications and possible relatedness of the various fundamental concepts which were formulated during the first and second decades of the century" (30, p. 103).

Rather than merely continuing to pursue such theories as a matter of course, greater progress might be made by pausing to re-evaluate our basic concepts of the properties of living organisms, by looking anew at the phenomena involved, and by attempting to develop more adequate and general theories of motivation, learning, thinking, and other forms of adaptive behavior (cf. 21, 24).

One method to help get ourselves out of our present conceptual maze with respect to learning and related phenomena might be to ask ourselves such questions as: What if we thought of the organism as possessing motivations of its own (rather than only those imposed or aroused by the experimenter), and unique patterns of abilities and interests which change as it grows older (rather than being more or less uniform and constant for all subjects)? What if we thought of learning as involving a modification of motivational (rather than response) systems? What if we concerned ourselves more with learning which is meaningful and important to the learner as a person (and less with the learning of segmental responses or artificial verbal materials)? What if we were more interested in learning which will be available to the individual over extended periods of time (and less with constructs which "explain" learning for only immediate or short-term recall)? What will be some of the outlines of a learning theory that is

articulate with our current knowledge of, for example, perception, or problem solving, or ego involvement?

It is quite appropriate that educational psychologists should take a more active role in developing theories and research programs which pertain to questions of this type. They should be more interested in attacking such questions than their colleagues in related disciplines. For one thing, adequate answers to such questions should be a basic part of the subject matter of this field. But equally important is the fact that educational psychologists have access to the "research resources" that are necessary to study the processes involved in human socialization, learning, and thinking. They, more than anyone else, have access to children of all ages and ability groups in ongoing, "complete" learning situations.

In summary, it may be true that educational psychologists are concerned with such conditions in their field as a lack of agreement on the basic subject matter, on appropriate training procedures, or on the relation of this field to other disciplines. But it seems equally true that such conditions will be alleviated when educational psychologists take more advantage of the fact that they are in a strategic position to make fundamental contributions to the general understanding of human behavior as well as to educational theory and practice. A This should be their proper concern.

4 In various institutions there are a number of persons interested in educational psychology who have begun to explore and define various aspects of human behavior in the classroom and closely related educational situations, and whose findings are relevant to more general theories of behavior. The researches of this type with which I am most familiar, those conducted at the University of Chicago, include studies of the effects of learned socialization and personality patterns on problem solving and other mental functions (16) and their implications for curriculum changes (15); the emotional, or general personality, concomitants of learning difficulties in disturbed children (2); the relation of developmental tasks and other socialization factors to the educative process (26); the study of students' thought processes in relation to classroom learning (6, 7); the relations between the nature of the control of group processes and the resulting behavior changes, such as learning (35, 36); the study of the effect of social role and role conflicts on the effectiveness of classroom teaching and learning (20); and the relation of various experiential, personality, and situational factors to the learning of symbolic materials (22, 23).

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GROUNDWORK FOR CREATIVE RESEARCH

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CIENCE is grounded in a field of beliefs. It is easy to forget this fact. In our effort to establish findings "beyond doubt," we are prone to wish we were men "beyond beliefs," and, wishing it were so, we are inclined to act as if it were so. This can lead to loss of perspective, lack of humility, and failure to take science as humanly creative.

To offset this tendency, it is important that one challenge oneself from time to time to a statement of the beliefs on which he is acting. This is what I have undertaken here. From statements concerning the social scene, the function of universities, the nature of man, important directions for research, etc., I come into a perspective on research as a creative enterprise.

Institutions are created by a society to serve its needs. Universities are no exception. Their role is to cultivate men who can take leadership in helping the people meet their most critical problems.

The most critical problem today is that of how men are to deal with men—how nations are to treat nations, how groups are to treat groups, how man is to treat himself. We have the physical power to destroy man if we will, or to serve him abundantly; the critical question is what man wants to do with himself.

Teaching men how to deal with men and doing research to improve such teaching is the primary obligation of universities now.

Teaching is impossible without consciously or unconsciously having in mind how one wants to affect the behavior of those who are taught. This requires a view of what one wants man to become. Relevant to any teaching, it is doubly pertinent when the problem is that of teaching men how to deal with men.

Formulating a view of what man is to become requires an assertion of positive values, a definition of what is good in human behavior. There is no escape from this necessity.

The sources for assertions of good are deep within the personal experience of the one who asserts them. They are the product of his total experience as a human being while trying to realize the good in life as he experiences it.

From the ground of the experienced good, a man projects what he wants, and, looking at the world of givens about him, he seeks to make things into what he would have them become.

In this respect he is like all living things. A plant reaches out to take chemicals from the soil to compose them into something of value within the living system of the plant. A man, likewise, reaches out to include forms from his environment (internal and external) to compose them into something of value within the system of his life. By such means, living things are able to fulfill their lives.

This is the dynamic of life. It is also the process of creation.

Although natively creative, man can be more or less clumsy in fulfilling his creative potential. There is a lot to a man, a lot to the universe—many levels and orderings. One can compose a little or much; potentially, there is always more. How much one composes depends heavily on the orientation of his conscious behavior.

If he is consciously oriented to the acceptance of himself and others as creative beings and if he seeks to consciously harmonize his deliberate acts with his inherent creative necessities, man can improve the level and quality of his creative performance. If he is asleep to large regions of himself or habitually holds to views which run counter to creativity, he can bungle his creative emergents.

The man I would have us become is the more creative man.

In taking the ideal of the more creative man, I am not alone. Inspection of cultural history reveals that the specimens of men whom our people honor with the appellation "great" are men who are also called "creative": statesmen, thinkers, artists, writers, teachers, inventors, scientists. Their walks of life are many, but their common quality is their capacity for creation. Deep down, and in the long run, the more creative man appears to be the man our culture idealizes.

This means that Americans have within them a constructive view of the kind of man they would like to see developed. However, this is a slumbering ideal lost in unconsciousness while, for generations, we have given our conscious effort to the conquest of a physical world.

At the founding of our country, we were relatively clear and conscious of our ideals for man. We had suffered in foreign lands before we had arrived here, and our ideals had been fired and firmed in the furnaces of personal struggle and affirmation. But as our generations have given themselves to the conquest of the physical environment, our ideals have sunk underground. Now, with the physical environment remarkably conquered, we don't know what it is to amount to—what it is we want the environment to do in the making of man.

As a result, we are now oriented more negatively than positively. We know what we are living against, but not what we are living for. We are equipped for reaction, but not for action. Lacking a realized and meaningful ideal, we lack the means of seeing and composing our environment constructively and integrally.

And yet, we also have slumbering within us the ideal of the creative man. We somehow know that the strength of America has come from her creative men.

If we can bring this ideal into prominent and practical focus, can clarify that which is common among creative men, and can show its relevance to the living of the average man, we might be able to aid the positive integration needed. Americans might respond with a welcome sense of self-discovery, a fresh affirmation of the value and meaning of their existence.

A search for what is common among creative men yields fruit when a study is made of the writings of acknowledged creative persons who have attempted to give expression to their experiences when involved in creation.

That which is common among creative men does not appear in personality pattern, media used, products produced, or environment provided. Persons can be creative whether introverts or extroverts, naive or sophisticated, impulsive or steady, recluses or active social participants. They can also be creative whether the medium they use is painting, writing, architecture, mathematics, teaching, administration, or child rearing. They can

turn out end products which are tangible or intangible, abstract or concrete, symbolic or substantial. This work they can do whether their environments are those of the busy city or the isolated country place, the rich man's home or the poverty-ridden hovel. These avenues, while interesting and potentially relevant, are not reaching into the heart of the matter.

Commonness comes when attention is given to the ways in which creative persons relate themselves to facets of their experiencing while creation is under way. The important thing is how the creative person handles himself in relation to (a) the extension of his experiencing, (b) the focusing of his experiencing, (c) the management of his actions during his experiencing, and (d) the derivation of significance from his experiencing.

The creative person seeks to extend his experiencing through holding himself open for increasing inclusions. This is evidenced by an inclination to take life as an adventure and a becoming, a curiosity and willingness to understand what is going on in oneself and in related aspects of the environment, a desire to get out to the edges of conscious realization and to feel a way into the unknown, an interest in new ideas and fresh perspectives, a spirit of play and experimentation.

The creative person seeks to focus his experiencing through self-differentiation and self-realization. This is evidenced by a willingness to be different in things that make a difference, an honoring of his own fulfillment even when it runs counter to common expectations of others, a persistent inquiry into the meaning of his own life, a feeling that his individual life has independent roots, an insistence on expression for self-clarification, a feeling that the world is, in important part, his own creation.

The creative person seeks to manage his actions during his experiencing through disciplining himself to serve the extension and focusing of his experience. This is evidenced by an insistence on mastering his materials and tools of work so well that these become a part of his own way of living, an insistence on the privilege of controlling his own work schedule, a willingness to stick with baffling problems over an extended period of time, a capacity to be consumed by his work, a seriousness in selecting work to do which is personally and deeply valuable to him.

The creative person seeks to derive significance

from his experiencing through dependence upon esthetic formings. This is evidenced by an insistence on harmony of form and function, a trusting of feeling to guide his way through an experience, a searching for the simplest structural forms to catch up a whole field of relations at once, an ability to think in terms of patterns of form, a sensing of a profound order in nature and a searching for that order in himself and in the universe, a testing of a solution by the way in which it seems to fall into place without forcing, a deliberate nourishing of aid from unconscious sources, a sensitive awareness to positive and declarative modes of thought.

Inquiry along the dimensions of openness, self-realization, control, and esthetic evaluation promises further refinements in specification so that implicitly creative behavior can be more explicitly denoted and identified. With identification, means are provided for judging methods and circumstances which are most congenial to the further development of creativity.

Research in these directions offers three important rewards: (a) a better conception of man as a creative being, (b) a better conception of the man we would become, and (c) better ways of ordering behavior and environment toward the actualizing of the man we would become.

In this construction, what is *described* in behavior is relevant to what is *valued* in behavior. The definition of "what is" is functionally relevant to "what might be." Conditions are provided for creative research.

The research I want is creative research. The science I want is a more creative science.

Scientific activity is basically creative. The essential characteristic of science is deliberate hypothesizing and testing. Hypothesizing is the act of projecting what is wanted, "what might be." Testing is an effort to compose givens, or "what is," into "what might be." The effort may succeed or fail, but whatever the outcome, the effort is to compose givens into something of value within the system of life of the scientist. This is to create.

If the effort succeeds, the scientist will say that he has "established truth"; "created truth" would be a more accurate term. If he fails, he will say that he has not yet found the truth. Truth is that which effectively harmonizes the "is" with the projected and valued "might be." Truth thus derived becomes a new "is." Truth is the product of creation, born as a composition of value-in-fact.

Despite the evident creative character of scientific endeavor, scientists seem not to be generally aware of this basic quality in their work. When asked directly, they may quickly say that scientific work is creative work; yet, actually, they have not thought through what this means for themselves or the training of others.

This is evidenced in tendencies to take science as a subject-matter product, neglecting science as an active human process; to fix attention on the scientific truth as already formed, neglecting scientific truth as a continuing creation; to take objectivity as the contending opposite of subjectivity, neglecting the emergence of objectivity as subjectivity clarified; to oppose feeling to thinking, neglecting the integral development of feeling and thinking; to assume an arbitrary separation of fact from value, neglecting the rooting of fact in value; to limit research training to teaching established methods of testing hypotheses, neglecting that half of the research process which has to do with the derivation of hypotheses which are significant for testing; to think of students as means to the teaching of science, neglecting science as means to the teaching of students; to take knowledge as the sufficient goal, neglecting its transformation into wisdom.

Perhaps most revealing of the scientist's frequent failure fully to appreciate his creative necessities is the degree to which he considers his activity to be distinctly different from that of men in the arts and humanities; and yet, scientific activity belongs with other creative endeavors, e.g., music, literature, painting, drama, architecture. For centuries, men in the arts and humanities have been giving their attention to creative works and workings. Scientists can profit from association with men in these areas at the point where efforts are made to learn how creativity is to be honored and nourished in its development.

Within the general run of scientists, the leaders are likely to be men who have recognized the role of creativity in their personal work; otherwise, they could not generate the behaviors which are required for making them leaders.

Einstein is an example. He knows that the critical matter is the cultivation of himself as a suitable instrument for creative fulfillment. He

pays attention to the content of his subject matter, but he pays even more attention to the quality of his own behavior. By being attentive to the shapings of experience in himself, he comes to the development of science. He knows that he cannot aim directly at his product because he does not know ahead of its appearance what it is going to be. What he does is to lend himself to creative thought and let his scientific formulations emerge as they will.

Einstein's behavior in his scientific work can be described according to the dimensions elsewhere presented for describing the behavior of any creative man. It is fair to hypothesize that other leaders in science, if able to express themselves on their intimate modes of working, would show similar orientation.

All scientists have a stake in cultivating creativity—for their own self-interest as well as for their service to mankind. However, social scientists, more than others, have a special reason for being intelligently concerned. Not only do they need to be creative to satisfy their own and society's emergent development, but they need a pattern of inquiry which fits their subject matter. Their subject matter being man, and man being a creative phenomenon, it is necessary that those who study man have creative modes of inquiry to match the requirements of their subject.

The principle that modes of inquiry be fitting for the phenomena inquired into is a stringent requirement acknowledged in science. But if it is stringent, it also offers hope for increasingly rapid development as integration increasingly occurs. It is an axiom in art circles that when an artist finds a way of handling his medium so that it fits the content with which he is dealing, emergent development of creative forms is exceedingly rapid. In addition, the product attains a living quality, having the power that seems everywhere to appear when a living thing is composed.

Social scientists have a challenge, but they also have a possibility of extraordinary richness for themselves and mankind.

The undertaking of research on man as a creative being is likely to bring with it a fundamental shift in the scientist's orientation.

Much of past research on man has been oriented, not to the understanding of man at his best and highest levels of integration, but at his worst and lowest levels of integration. Emphasis has been put upon the identification and treatment of the sick and the abnormal. This has come about because of a pressure to serve those in need. The motive has been sound, but the consequence, in the absence of a positive definition of good, has been the acceptance of good as the absence of what has been identified as bad. The adjusted person has come to be defined as one who is not maladjusted, without there being a declarative view of what the fulfilled man may be. By this orientation one's positive guidance is limited to the prevention of bad; it is not toward the accomplishment of a positive state of being which, in the course of its achievement, makes the bad simply out of place.

Orientation to man as a creative being is orientation to the positive, and it marks a shift so profound that few can guess its ultimate consequences. It is a whole orientation to life with life taken, not as the absence of death, but as a vital forming so composed that it can be increasingly fulfilled. It is also an orientation to peace with peace taken, not as the absence of war, but as the presence of a vital social harmony, each man fulfilling himself as he aids in the fulfillment of others.

Not only is the scientist's general orientation likely to shift, but his more specific ways of working are also likely to change as he gives himself to research on man-as-a-creative-being.

He will soon find that it takes creative behavior to comprehend creative behavior. The identification of creative behavior in others will be found to depend in large part on realizing creative qualities in his own behavior. The primary source for research knowing will thereby come to be in his own experience, with hypothesizing and testing to check for harmonies with the experiencing of others.

He will soon find that he wants a particular kind of association with other research workers. Caught at the frontier of his own attempts at self-growth through inquiry, he will want to meet other research workers who are similarly caught on their own frontiers of self-growth. He will want to share experiences in self-realization and self-management and to find better ways of making research serve this end. For this purpose, he will want associations which are informal, freely made, and personally as well as professionally significant.

He will come to value a wide range of disciplines.

He will value the arts and humanities for their concern with the creative products of man, looking not so much at the forms of the products as at the formings of the production process. He will value the social sciences for their concern with the behavior of man, looking not so much for typical classifications of behaviors but for modes of comprehending behaving. He will value the physical and natural sciences for their concern with the sciencing of man, looking not so much at the resulting science but at the scientist as creatively thinking man.

He will find his greatest difficulty in expression and communication. He will discover that he is trying to use the formings of artists while trying to use the forms of scientists, and he will find that these are not culturally synchronized for his use. With formings and forms split, he will meet a difficult split in himself, and when he speaks, even at his best, he will find that what he says may somehow be hauntingly relevant to both scientists and artists but not clear to either.

He will dislike his clumsiness, but he will stick with his work and its necessities. He will become increasingly convinced that what he is trying to do is something which society, in many ways, is now trying to burst through to do. He will sense that his problem is the cultural problem of getting values clear, of integration, of transcending reactior with action, of establishing a positive basis for peace in the individual and in the world.

He will aid his university in fulfilling its social function in these times.

Received March 29, 1953.

THE DEMISE OF THE GREENBERG AMENDMENT

STUART W. COOK, Chairman HERBERT ZUCKER, Associate Chairman

Joint Council of New York State Psychologists on Legislation

HE legal regulation of workers in the field of human relations is taking shape as an issue of national scope. Psychologists in different states have been involved with the problem in two ways. On the one hand, they have attempted to resist the passage of legislation that would restrict the application of psychology, often working in collaboration with other professions. On the other, they have sought to develop a positive solution to the complex problem of legal regulation in this field.

Information and experience gained by any group along either of these lines is likely to be of use to psychologists grappling with similar problems in other parts of the country. During the past year the psychologists of New York State found it necessary to organize a campaign to defeat restrictive legislation initiated by a few psychiatrists in the state and sponsored by the House of Delegates of the State Medical Society. A review and general discussion of this campaign appeared in Across the Secretary's Desk in the April issue of the American Psychologist.

In a recent report to New York psychologists we described the final outcome and summarized the lessons we feel are to be learned from the campaign. We are publishing this report in the unhappy conviction that our experience in New York will be repeated in other states and in the hope that our colleagues in those states may find of value this account of the countermeasures we employed.

A REPORT FROM THE JOINT COUNCIL OF NEW YORK STATE PSYCHOLOGISTS ON LEGISLATION

Now that the State Legislature has adjourned for the year, we would like to bring you up to date on the very successful campaign to defeat the 1954 version of the Medical Practices Act amendment. Some important lessons were learned during the year, we feel, and we wish to pass these on for your consideration. You will be interested, too, we feel sure, in a brief resume of other accomplishments and plans of the Joint Council. Informational Campaign for Legislators

Some weeks in advance of the introduction of the Greenberg amendment, an estimated 145 psychologists, armed with informational kits, began visiting designated members of the State Legislature. Even earlier Joint Council officers had presented to legislative leaders psychology's objections to the proposed amendment. Following the introduction : f the amendment, psychologists throughout the state were notified of the emergency. This led to the sending of letters and telegrams in large numbers to the Senate. An emergency mass meeting of 950 psychologists, held in New York City on February 15th, adopted a resolution of opposition to the bill, which was sent to legislative leaders. Legislative leaders indicated that the volume of opposition to the bill was exceptionally large.

Through these various communications the legislators, in most cases for the first time, began to get a picture of psychology—who psychologists are, what they do, what type of training they receive, what community needs they serve, and the caliber of the persons in the field. The results were striking. Some 70% of the legislators who expressed themselves on the Greenberg measure indicated they were opposed to it. The remaining 30% were either noncommittal or uncertain. The Majority Leader of the Senate wrote to various constituents that he would vote against the bill if it ever came to the floor. Senator Greenberg himself made it clear that he recognized the dangers of his bill and that he did not intend to push it.

Psychologists in Senator Greenberg's community were particularly active and effective. Two newspapers in his local area, the *Brooklyn Daily* and the *Brooklyn Eagle*, took editorial positions against his proposed amendment.

With only two or three noncommittal exceptions, all members of the Education Committee of the Senate recorded their opposition to the bill in talks with Joint Council officers. When the session ended no move had been made in the Committee to report the bill out.

The fruits of this phase of our legislative work are reflected rather convincingly in the following incident: Late in the legislative session a bill which looked as if it might have unfortunate implications for the profession of psychology came before the Public Health Committee of the Assembly. By the time Joint Council officers investigated, the Committee had already decided to pigeonhole the bill until the differences between the professions of psychology and psychiatry have been clarified. Additional evidence of our impact may be seen in the fact that several legislators have expressed their willingness to sponsor legislation which would insure that an objective study be made of the problems of legal regulation in the mental hygiene and mental health areas.

Legislative Collaboration with Other Professions

Throughout the year representatives of the Joint Council held consultations with leaders of related professions regarding the dangers of restrictive legislation. Liaison committees met with leaders in the ministry, social work, medicine, law, education, vocational guidance, speech correction, and remedial reading. As a result, when Senator Greenberg introduced his bill the following organizations wrote to legislative leaders, opposing the amendment: American Orthopsychiatric Association; New York City Chapter, American Association of Social Workers (in addition, the New York City Branch sent its own statement); American Association of Psychiatric Social Workers; New York Personnel and Guidance Association; Association of Vocational and Educational Counselors; National Rehabilitation Association, Region II; American Speech and Hearing Association; American Psychological Association; New York State Psychological Association. The Joint Council arranged for all legislators to get copies of these letters.

Collaboration among the New York sections of some of the above organizations led to the suggestion that the parent organizations discuss the possibilities of collaboration on the national level in regard to the problem of the legal regulation of this field. A conference was then organized under the auspices of a number of these national organizations. The participants developed a statement of professional independence, which underscored the legitimate and necessary place of the different disciplines in the field of human relations. The declaration was issued jointly by the following national

organizations: American College Personnel Association, American Personnel and Guidance Association, American School Counselors Association, National Association of Guidance Supervisors and Counselor Trainers, National Vocational Guidance Association, Student Personnel Association for Teacher Education, and the American Psychological Association. The New York Herald Tribune of March 18 carried the story of this development.

Opposition to the Greenberg bill among members of the clergy was widespread. Five clergymen of different faiths, in collaboration with a committee of the Joint Council, wrote a letter of protest to legislative leaders. These same clergymen suggested similar action in letters to 600 of their colleagues. At the mass protest meeting held in New York, a Catholic priest and a Protestant minister were among the major speakers. A Jewish clergyman, unable to attend, expressed his sentiments in a statement which was read to the audience.

Conferences with State Government Officials

During the course of the year, Joint Council officers held a series of legislative conferences with the Governor's Counsel and with representatives of the State Department of Education and the State Department of Health. During these meetings the problem of psychology and legal regulation was discussed as well as the specific issue of an amendment to the Medical Practices Act. One of these conferences was attended by representatives of the State Medical Society. One concrete outcome of this conference is worthy of special notice. The state government representative present suggested to the representatives of medicine and psychology that he would be interested in sponsoring a series of conferences between the two professions. These conferences would be devoted to a consideration of the place of psychology in the field of human relations and to the type of legislation appropriate to such professional functioning. These meetings will be initiated soon.

Public Information

With advance information that a restrictive bill would be introduced into the Legislature, it seemed advisable to concentrate our educational efforts this year on decision-making levels. Consequently, as already noted, our program emphasized personal talks with and letters to legislators and state officials, and liaison with other professional groups.

There was insufficient time and energy to establish, in addition, a thoroughgoing public information program to gain the support of the public and press.

Inevitably, however, the legislative controversy was accompanied by efforts on both sides to win public support. Letters to the editors of various newspapers streamed from partisans at a great rate. Letters opposing the amendment were often sponsored by social workers and clergymen. Individual psychologists and local psychological organizations attempted to interest local newspapers in the problem. One or another type of item (letter to the editor, news story, or editorial) appeared in the following newspapers: Ithaca Journal, New York Times, Brooklyn Eagle, Brooklyn Daily, New York Herald Tribune, Vassar Miscellany News (college paper), New York World Telegram and Sun. These represent clippings we have on hand; others may have been printed of which we are not aware. In addition, an important newspaper and a major national news magazine indicated they were prepared to register their opposition to the bill if it began to make any headway through the Legislature.

Some Observations and Future Plans

Legislation. We assume, in line with our longrange objective, that during the 1955 session of the Legislature, we shall attempt to introduce a bill providing legal status for psychologists. Such a step was not taken this year in view of the uniform advice received from experienced legislators and officials that defeat would be inevitable.

Since the basis for this advice rests upon the predicted opposition (and influence) of the State Medical Society, the projected conferences with psychiatrists and governmental representatives assume considerable significance. Should they be successful, legislation will be introduced.

Should the conferences fail, on the other hand, several courses are open. One of these is to introduce a bill in the hope of mustering enough support to overcome the opposing influences which would be brought to bear on the Legislature and the Governor. Another is to support the establishment of a representative legislative commission to study problems of the legal regulation of professional groups working with emotional problems.

In the event of failure in the conferences there can be little doubt that a new attempt to amend the Medical Practices Act will be made.

Relationship with medicine. In our legislative program it would be unfortunate for us to lose sight of the fact that attacks upon psychology are initiated by a relatively small group of psychiatrists. These individuals are able to utilize the machinery of the Medical Society in furthering their objectives. However, the fact that the Society has taken an "official" stand by no means implies that the body of medical men are ranged against us. The evidence suggests, rather, that medical men as a group are rather uninformed and openminded on this question. For example, considerably more opposition than support was registered in Albany by physicians to the Greenberg amendment.

To this must be added what we know about the ever-widening area in which psychology and the different medical specialties are working together. While we are most familiar with this cooperation as it involves the majority of psychiatrists, it goes much beyond this into such areas as pediatrics, neurology, orthopedics, internal medicine, etc. It would be tragic if our present disagreement with psychiatrists were to interfere in any way with this broader development.

Interprofessional collaboration. It seems important to keep in focus, for ourselves as well as the public, that this is not a struggle between psychiatry and psychology. Rather there are differences between psychiatry on the one hand, and social workers, ministers, remedial and rehabilitation workers, vocational counselors, and psychologists on the other.

A few psychiatrists have taken the public position that only psychologists oppose their legislative position. Since it is our profession which is attacked specifically there is some temptation to strike back alone. This temptation should be resisted.

Instead it seems wise, wherever possible, to take our stand in conjunction with our allies. Opposition expressed by a group of varied and responsible professions is not only more forceful but also emphasizes more clearly the vital issues of public welfare which are at stake.

Public information. Throughout the year and particularly during this last phase of the legisla-

tive conflict, a great need was felt for a wellorganized public information program. Our experience with the strikingly positive responses of legislators and state government officials to our presentation of the issues involved in the problem of psychology and legislation demonstrates that such a program might be quite effective.

However, it is apparent that certain vital public information operations cannot be carried out effectively by the Joint Council. Such activities as correcting misinformation in the press, radio, and magazines, obtaining news coverage of newsworthy events involving psychology, developing and distributing educational material about psychology, etc. require time and facilities beyond those available to the psychologist.

After considerable consultation and deliberation, the Joint Council decided it would be necessary to hire a professional public relations counselor if the work is to get done and if the program is to have continuity from year to year. Fortunately, the Edward L. Bernays firm expressed willingness to handle public relations for the Joint Council for a trial period of one year as a service in the public interest. The Council agreed to defray overhead expenses of the firm to an upper limit of \$5,000. The public information program to be initiated in collaboration with the Bernays firm will be state-

wide in scope and local psychological organizations will be asked to share a major part of it.

Summary

There is little doubt but that the problem of legislation will be with us for a number of years. Defensive action has been forced upon us; although it has been relatively effective, it is not likely to solve the long-range problem. This aspect of our activity may in time, however, help to convince the psychiatrists involved that the issue cannot be resolved by unilateral action on their part. As this becomes unmistakably clear the chances for rational discussion may be improved.

We like to look upon the legislative campaign just ended as the first concerted large-scale effort by psychologists to carry to elected governmental leaders information and understanding about an issue affecting psychology's service to society.

To the many hundreds of New York psychologists who took part in this successful campaign we think congratulations are in order. From those of us at "headquarters" who solicited financial support, your telegrams and letters, and your visits to legislators, newspapers, and community leaders—we wish to send sincere appreciation for a wide-spread and helpful response.

Received June 24, 1954.

PROCEEDINGS OF THE FORTY-SIXTH ANNUAL MEETING OF THE SOUTHERN SOCIETY FOR PHILOSOPHY AND PSYCHOLOGY

OLIVER L. LACEY, Secretary

University of Alabama

HE forty-sixth annual meeting of the Southern Society for Philosophy and Psychology was held at the Biltmore Hotel in Atlanta, Georgia, April 15–17, 1954. The host institution was Emory University. Local arrangements were under the efficient direction of Emily S. Dexter, O. W. Eagleson, L. E. Loemker, J. E. Moore, and M. C. Langhorne. The Program Committee consisted of E. M. Adams, C. A. Baylis, L. D. Cohen, Norman Guttman, Dannie Moffie, John Thibaut, and the Secretary.

The Council of the Society met on the evening of April 15. Those present were President Karl M. Dallenbach, Edward G. Ballard, Charles A. Baylis, William M. Hinton, Oliver L. Lacey, M. C. Langhorne, Willis Moore, Herbert C. Sanborn, and Karl Zener.

The program began with a symposium on "Regional Research and Training Activities in Psychology" with Frank A. Geldard as Chairman and William J. McGlothlin and Nicholas Hobbs as contributors. Six sessions in philosophy and nine sessions and two luncheon meetings in psychology were held on Friday. Following the afternoon meeting, the Departments of Philosophy and Psychology were joint hosts to the Society at Emory University. On Saturday morning there was a symposium on "Language and the Unity of Science" with John B. Wolfe presiding. Chairmen of the philosophy sections were: Edgar H. Henderson, Howard L. Parsons, Leroy E. Loemker, Richard L. Barber, Willis Moore, and Martha Pingel. Chairmen of the psychology sections were: Marion E. Bunch, Carl L. Altmaier, Jr., Stanford C. Ericksen, John F. Dashiell, Joseph E. Moore, Rolland H. Waters, Eliot Rodnick, Edward E. Cureton, and T. W. Richards.

At the Society's annual banquet on Friday night Dr. Karl M. Dallenbach delivered the presidential address, entitled "Phrenology versus Psychoanalysis." Minutes of the Annual Business Meeting

President Dallenbach called the meeting to order at 11:30 A.M. Saturday. The minutes of the forty-fifth annual business meeting were approved. The report of the Secretary was read and received, and the report of the Treasurer was read and approved. The latter report indicated a balance of \$1,245.71 in the treasury as of April 13, 1954. Dr. A. G. A. Balz's report as delegate to the Southern Humanities Conference was read and received.

On recommendation of the Council, ten new associate members and twenty-eight new members were elected to the Society, and Robert D. Dugan was elected to full membership from the status of associate member. The associate members are: Panayot K. Butchvarov, John J. Compton, John T. Doby, Andrew R. Eickhoff, Norman R. Ellis, Antonia F. Morgan, Herbert C. Quay, Norman Reichenberg, Rhoda Stolper, and Robert W. Wildman. The full members are: Oscar S. Adams, Carl L. Altmaier, Jr., Richard J. Anderson, George R. Bartlett, Roger C. Buck, Broadus N. Butler, Romane L. Clark, Austin C. Cleveland, Edward L. Flemming, Everett W. Hall, Harry Helson, Albert W. Heyer, Jr., Elmer D. Hinckley, Milton B. Jensen, Ottis K. McMahon, Minnie C. Miles, William J. Morgan, James W. Oliver, Luigi Petrullo, Henry L. Pope, Sydney C. Rome, Julius Seeman, Henry D. Shanklin, III, Manuel J. Vargas, William J. von Lackum, Rolland H. Waters, Leopold Winter, and Emma O. Wisner.

A number of miscellaneous items stemming from the Secretary's report were acted upon. The question of utilizing Thursday afternoon for meetings was explored, and it was agreed that this could be left to the discretion of the President of the Society and the Chairman of the Program Committee who would be guided by the number of acceptable papers to be presented and the number of members presumably willing to attend an early session. Dr. Edward E. Cureton presented the report of an ad hoc committee to consider the formation of a Southeastern Psychological Association. The committee recommended: (a) that the Council invite the prospective new association to meet with the Southern Society for Philosophy and Psychology (apart from business meetings); and (b) that the Council urge the psychological members of the Southern Society for Philosophy and Psychology to support the Southeastern Psychological Association and to continue to support the Southern Society for Philosophy and Psychology. The recommendations were discussed and approved.

Invitations to the Society for the 1955 meetings were presented by members from Washington University and Tulane University. The membership voted to accept the Tulane invitation to hold the meetings either in New Orleans or in Biloxi according to available hotel facilities.

The following officers and Council members were elected by the Society: President, Charles A. Baylis; Secretary, Joseph E. Moore; Treasurer, Nicholas Hobbs; Council Members, Lewis Hahn and Edward E. Cureton.

Note was taken of the excellent coverage of the meetings given by the Atlanta newspapers, and the Secretary was directed to write an expression of appreciation to them.

The Society unanimously recorded its gratitude to the Departments of Philosophy and Psychology of Emory University; to the Biltmore Hotel; to the Atlanta Convention Bureau; to the Committee on Local Arrangements; and particularly to Dr. M. C. Langhorne, Chairman of this Committee, for their outstanding hospitality. The meeting was adjourned at 1:00 P.M.

PROGRAM

Thursday Evening

Regional Research and Training Activities in Psychology

FRANK A. GELDARD, Chairman

Regional developments in training and research in psychology. William J. McGlothlin, Southern Regional Education Board.

The Council on Psychological Resources in the South. Nicholas Hobbs, George Peabody College for Teachers.

PHILOSOPHY

Friday Morning Sessions

Section 1: Epistemology and Metaphysics

EDGAR H. HENDERSON, Chairman

Disagreement and the critique of presuppositions. ROBERT WHITTEMORE, Tulane University.

Inquiry and existence. Albert G. A. Balz, University of Virginia.

Are sense-data obsolete? ELIZABETH JANE STUCKY, Duke University.

Logical empiricism on the mind-body problem. John Kuiper, University of Kentucky.

The epistemological matrix of propositions. Peter A. Carmichael, *Louisiana State University*.

Section 2: History of Philosophy

HOWARD L. PARSONS, Chairman

Parmenides: the relationship between the way of truth and the way of opinion. Rosamond Kent Sprague, *Bryn Mawr College*.

Is The Republic Plato's utopia? HAROLD N. LEE, Tulane University.

The consistency of Aristotle. John S. Marshall, University of the South.

Some metaphysical assumptions in Dewey's philosophy. Paul Welsh, Duke University.

James's psychological justification of his pragmatic analysis of truth. ROBERT T. ROBLOFS, Emory University.

Some observations on Whitehead's speculative philosophy. Hugh H. Caldwell, *University of Virginia*.

Section 3: Meaning

LEROY E. LOEMKER, Chairman

Signs and symbols as "standing for." RUBIN GOTESKY, University of Georgia.

- Meaning and function of names. JASON XENAKIS, University of North Carolina.
- "Meaning" and "use." L. O. Kattsoff, University of North Carolina.
- Reflections after Wittgenstein. James K. Feible-Man, Tulane University.

Friday Afternoon Sessions

Section 4: Logic and Philosophy of Science

RICHARD L. BARBER, Chairman

- Conventionalism, concepts, and laws. Romane Clark, Duke University.
- A refutation of the analytic-synthetic distinction.

 D. C. Yalden-Thomson, University of Virginia.
- Some remarks on the problem of reflexivity. Curt S. Booth, *University of North Carolina*.
- Russel on relations. John Henry Melzer, University of Kentucky.

Section 5: Meta-Ethics

WILLIS MOORE, Chairman

- Analysis and criteriology in philosophy of ethics. Bernard Peach, *Duke University*.
- On the independence of normative ethics and metaethics. Lucius Garvin, *University of Mary*land.
- Some recent approaches to a system of duties. A. M. Allan, Hampden-Sydney College.
- Language strata, ethical meanings, and standards.

 KAI E. NIELSEN, Duke University.

Section 6: Axiology

MARTHA PINGEL, Chairman

- Toward a semiotic philosophy of art. Louise Nisbet Roberts.
- Reflections on authority and freedom. PAUL E. PFUETZE, University of Georgia.
- Some formulae for aesthetic analysis. Sydney C. Rome, College of William and Mary.
- Constitutionality and segregation. Herbert San-BORN, Vanderbilt University.

PSYCHOLOGY

Friday Morning Sessions

Section A: Animal Learning

MARION E. BUNCH, Chairman

- Learning sets from minimum stimuli. ARTHUR J. RIOPELLE, Emory University.
- Differential problem sequences and the foundation of learning sets. Charles L. Darby and Arthur J. Riopelle, *Emory University*.
- One-trial reversal by rats with small frontal injury. Loh Seng Tsai, Tulane University.
- One-trial conditioning with a note on generalization decrement. H. C. HAYWARD, *University of Tennessee*.
- Reinforcing values of dextrose and sucrose solutions. Norman Guttman, Duke University.
- Reinforcement in learning theory: a proposed realignment. Rolland H. Waters, *University of Florida*.

Section B: Personality and Abnormal

CARL L. ALTMAIER, JR., Chairman

- An investigation of perceptual defense. Phillip Smith, *University of Kentucky*.
- An experimental investigation of several factors involved in visual perception. Kenneth R. Newton, *University of Tennessee*.
- Validation of peer leadership ratings: medical complaints as criterion. C. E. Izard, *Tulane University*, and J. H. Manhold, *Naval School of Aviation Medicine*.
- The sensitivity of repeated MMPI administrations to changes in patient behavior accompanying insulin coma therapy. Morris Roseman, VA Hospital, Roanoke, Virginia.
- The relation of the electroencephalogram to memory and intelligence in a normal aged group. Walter D. Obrist, *Moosehaven Research Laboratory*.
- The Kuder Preference Record and personal adjustment: a study of tuberculous patients. Joseph Newman, VA Hospital, Memphis, Tennessee.

Section C: Motivation

STANFORD C. ERICKSEN, Chairman

An analysis of the characteristics of a water-drinking operant. T. F. Gilbert and W. T. James, University of Georgia.

Social facilitation of eating behavior in puppies following satiation. W. T. James, *University of Georgia*.

Random activity as a function of food deprivation in the white rat: I. Rats satiated since weaning. Paschal N. Strong, *University of Tennessee*.

Drive has little effect on unconditioned responding and early learning. R. R. Shrader, W. O. Jen-Kins, N. W. Mandy, Jr., C. Walter, and P. Whitmore, *University of Tennessee*.

Motivation in learning for tasks of differing complexities. Marvin Steiner, University of Kentucky.

Section D: Personality and Social

JOHN F. DASHIELL, Chairman

Variations in marital needs with age, sex, marital status, and regional location. M. C. Langhorne AND Paul F. Secord, *Emory University*.

Personalities in faces: III. A cross-cultural comparison of impressions of personality in faces. Paul F. Secord and William Bevan, *Emory University*.

A cross-cultural study of verbal behavior with two psychological principles. AIMEE TSAI AND LOH SENG TSAI, *Tulane University*.

Children's mathematical concepts. Betsy Worth Estes, University of Kentucky.

Attention spans of children for experimentally designed toys. B. von Haller Gilmer and Kenneth E. Moyer, Carnegie Institute of Technology.

Effective intelligence as measured by the sentence completion technique. George E. Copple, Vanderbilt University.

Section E: General

JOSEPH E. MOORE, Chairman

Interactive effects of number of intervals, number of judges, and estimating formulae on the reliability of ambiguity values. SAM C. WEBB, Emory University.

Variations in Graduate Record Examination scores with age and recency and type of undergraduate training. R. T. OSBORNE AND WILMA B. SANDERS, University of Georgia.

Persistency measurement and analysis. Jack Spoone and Henry F. Dickenson, *Lincoln Me*morial University.

Comparison of two methods of assessing the accuracy of counselor predictions of counselee success. G. D. Mayo, Naval Air Station, Memphis, Tennessee.

Factors related to nonattendance in a metropolitan public high school. James Edward Green, Sr., University of Georgia.

What do high school seniors know about sex? Gelolo McHugh, Duke University.

Luncheon Programs

Psi Chi Meeting

PHILIP WORCHEL, Chairman

Luncheon Meeting of Committee on Psychology in Medical Education

Louis D. Cohen, Chairman

Psychology in the preclinical years. W. Grant Dahlstrom, University of North Carolina.

Psychology in the clinical years. WILLIAM J. von Lackum, University of Tennessee Medical School.

Psychology in relation to pediatrics and other medical specialities. Thomas W. Richards, Louisiana State University.

Friday Afternoon Sessions

Section F: Human Learning

ROLLAND H. WATERS, Chairman

Acquisition of a paired-associate perceptual-motor skill. Eva Neumann, C. H. Ammons, and R. B. Ammons, *University of Louisville*.

Reminiscence as a function of chronological age.

MARION E. BUNCH AND FREDERICK THUMIN,

Washington University.

Autonomic concomitance of serial learning. WIL-LIAM J. VON LACKUM, University of Tennessee. A test of Hovland's communication analysis of concept learning. Mohammed Khattab and Ernest Meyers, University of Kentucky.

Section G: Anxiety and Stress

ELIOT RODNICK, Chairman

The effect of experimentally produced sleep deprivation on projective test data: I. The Rorschach. EVELYN T. RULE, University of Tennessee.

The Rorschach examination as a stress situation. Hudson Jost, University of Georgia.

Effects of stress upon certain physiological mechanisms and behavior of the albino rat. John M. Bevan, *Davidson College*.

An experimental-clinical study of anxiety and repression. Philip Worchel, University of Texas.

Section H: Sensory Processes

EDWARD E. CURETON, Chairman

A response analysis approach to the comparison of auditory and visual data presentation. R. H. Henneman, *University of Virginia*.

Effects of filtering noise on masked thresholds. E. P. Horne, *University of Florida*, and Conrad C. Bishop, *Tyndall Air Force Base*.

Relations among some measures of pattern discriminability. O. S. Adams, *Emory University*, AND P. M. Fitts, *Ohio State University*.

Breadth of experience, ease of discrimination, and efficiency of generalization. WILLIAM BEVAN, Emory University, AND PER SAUGSTAD, University of Oslo.

The effect of sleep deprivation on taste thresholds and preferences. Ernest Furchtgott, University of Tennessee.

Section I: The Self Concept

T. W. RICHARDS, Chairman

Q technique in the measurement of the self concept: a comparison of the free-choice and the forced-choice methods. MARY EPSTEIN, George Peabody College for Teachers.

Changes in self description as a function of replication. Don M. Taylor, University of Tennessee.

The relation between acceptance of self and acceptance of others shown by three personality inventories. Katharine T. Omwake, Agnes Scott College.

Individual questionnaire variance: an index of differentiation of self concept and body image.

SIDNEY M. JOURARD AND RICHARD REMY, Emory University.

Empathy as reflected by variations in the self concept. William H. Fitts, Vanderbilt University.

Friday Evening

Annual Banquet

Presidential Address: Phrenology versus Psychoanalysis. KARL M. DALLENBACH, *University of Texas*.

Saturday Morning

Joint Session

Symposium:

Language and the Unity of Science

JOHN B. WOLFE, Chairman

JAMES G. MILLER, *University of Chicago* (Representing Psychology)

Davis Howes, Aero-Medical Laboratory, Wright-Patterson AFB. Discussion of Professor Miller's paper.

ROGER BUCK, Visiting Professor at Duke University (Representing Philosophy)

EVERETT W. HALL, *University of North Carolina*. Discussion of Professor Buck's paper.

Council

EDWARD G. BALLARD, CHARLES A. BAYLIS, M. C. LANGHORNE, WILLIS MOORE, GLENN NEGLEY, HERBERT C. SANBORN (Honorary Member for Life), KARL ZENER, and officers.

PROCEEDINGS OF THE THIRTY-FOURTH ANNUAL MEETING OF THE WESTERN PSYCHOLOGICAL ASSOCIATION

LEONA E. TYLER, Secretary

University of Oregon

HE Western Psychological Association held its thirty-fourth annual meeting Thursday through Saturday, May 20–22, 1954, in the Wilton Hotel, Long Beach, California. Total registration was 840. One hundred and forty-two papers, eight symposia, six special luncheons, an invited address, and a public information program were scheduled, in addition to the presidential address and the business session. The California State Psychological Association, the California Association of School Psychologists, and the Society for Research in Child Development participated in the program.

At the annual banquet Friday evening Nancy Bayley delivered the presidential address, "The Growth of Intelligence." In this paper she presented not merely an organized summary of the findings of the California Growth Study, but a synthesis of the many longitudinal studies of intelligence that have recently been reported by various workers. Two salient conclusions emerging from this body of evidence are that tests in infancy and early childhood cannot be used to predict later intelligence levels and that the scores of young adults show increases from one test occasion to the next instead of the decreases which cross-sectional studies have led us to expect.

The Arrangements Committee included representatives of UCLA, USC, Occidental College, Long Beach State College, and the Veterans Administration. James F. T. Bugental acted as chairman and Thomas G. Macfarlane as Long Beach coordinator. Other members of the Arrangements Committee were Gilbert Brighouse, Alfred Jacobs, and Edwin Shneidman. David Ruja was in charge of the placement office. The Program Committee, under the chairmanship of the Secretary, consisted of Richard Littman, John M. Warren, Norman Sundberg, Robert Boyd, and Frederick Courts. The Publicity Committee consisted of Frank J. Kirkner, Chairman, Robert L. Hoffman, Daniel W.

Langston, Richard G. Laux, Emil E. Lubick, and Thomas G. Macfarlane.

At the business meeting Saturday morning several actions were taken. From now on meeting places are to be selected two years in advance of the meeting so that the person who is to be Arrangements Chairman may serve on the Arrangements Committee for the meeting previous to the one for which he is responsible. In view of the fact that the association has grown so large that some of the informal procedures of the past are no longer adequate, the President was asked to appoint a special committee on the structure of the organization. This committee is to consider carefully what changes may be advisable, especially with regard to the annual meetings, and try to come to some conclusion with regard to the emphasis we should give to research papers, symposia, invited addresses, and workshops around central issues in our program planning. The AAAS meeting in Berkeley in December was announced, and attention was called to the plans for sessions which will be of special interest to psychologists. It was decided that an advisory ballot be included with the mail ballot for President-Elect to ascertain members' preferences for meeting places in 1955 and 1956. Appreciation was voiced to the Local Arrangements Committee and the graduate students who assisted them, and to the Long Beach Convention Bureau and Fred Delano, its publicity director.

In the mail ballot subsequent to the meeting Allen Edwards was chosen President-Elect. On the basis of what the ballot showed about preferences for meeting places, the Executive Committee decided not to hold a separate meeting in 1955, since the American Psychological Association is scheduled to meet in San Francisco, but to accept the invitation of the University of California at Berkeley for 1956.

PROGRAM

Projective Techniques

JEAN W. MACFARLANE, Chairman

- An experimental study of shading responses to Card VI of the Rorschach. DAVID K. ARNOLD AND PHILIP A. MARKS, Long Beach State College (introduced by Thomas G. Macfarlane).
- Color and emotion in the Rorschach and in other psychological tests. Charles A. Barnes, *University of Arizona*, and Clay E. George, *Agricultural and Mechanical College of Texas*.
- Attitudinal correlates of Rorschach's experience balance. James O. Palmer, Sonoma State Hospital, Eldridge, California.
- Rorschach signs of mental deterioration in posttraumatic brain damage. IRLA LEE ZIMMERMAN AND J. SLOAN BERRYMAN, School of Medicine, University of California, Los Angeles.
- The reliability of Rorschach interpretations. WILLIAM E. DATEL AND JOSEPH A. GENGERELLI, University of California, Los Angeles.
- An investigation of some examiner influences on productivity in the Rorschach test. James T. Marsh, School of Medicine, University of California, Los Angeles.
- Interrater agreement on level of adjustment using the Figure-Drawing and Group Rorschach tests. Dale Westwood and IJA N. Korner, *Univer*sity of Utah College of Medicine.
- Correspondence between attitudes and images of parents in TAT stories and in therapeutic interviews. Mortimer M. Meyer and Ruth S. Tolman, VA Mental Hygiene Clinic, Los Angeles.
- The effects of disturbing and quiescent music on adolescents' perceptions of Thematic Apperception Test pictures. Bernice Baker, Long Beach State College (introduced by Thomas G. Macfarlane).
- The Szondi: internal or external validation? Lewis Aumack, Utah State Hospital.

Mental Testing

ANDREW L. COMREY, Chairman

A comparative study of the Revised Stanford-Binet and the Wechsler Intelligence Scale for

- Children administered to a group of thirty stutterers. D. PHILLIP POST, China Lake Elementary School District (introduced by William B. Michael).
- The difference in IQ between the Binet and the WISC scales—a critical study. Jack Fox and James C. Coleman, University of California, Los Angeles.
- Levels of difficulty for adolescents on the items of the Wechsler-Bellevue Scale. G. ELIZABETH BRYAN AND MORONI H. BROWN, *University of Utah* (introduced by Moroni H. Brown).
- Age and sex variability on the Wechsler-Bellevue Scale. Moroni H. Brown and G. Elizabeth Bryan, *University of Utah*.
- Evaluation of "culture free" intelligence. HAROLD GEIST, Solano County School System, California.
- Evaluation of a pilot classroom program for severely mentally retarded children. David H. Fils, Office of Los Angeles County Superintendent of Schools.
- The relationship of certain personality variables to grade point average. J. W. FRICK, *University of Southern California* (introduced by J. P. Guilford).
- Some personality differences between high-ability high school students who do, and do not, go to college. Harrison G. Gough, *University of California*, *Berkeley*.

Personality I

Louis P. Thorpe, Chairman

- Some limitations of current measures of psychological understanding. Betty L. Kalis and Robert E. Harris, *University of California*, *Berkeley*.
- An approach to goal setting-rigidity: a comparison of a level of aspiration situation specifically designed to measure rigidity with related measures. Seymour L. Zelen and Eugene E. Levitt, Child Welfare Research Station, State University of Iowa.
- Perceptual reaction and dominant-submissive tendencies in psychiatric cases and normals. Robert W. Cartwright, VA Hospital, Roseburg, Oregon.

- Effect of ego-involvement and mild stress on recall of interrupted and completed tasks. Thomas E. Parker, *Pepperdine College*.
- The relation between personality adjustment and course achievement in abnormal psychology. Eugene S. Mills, Whittier College.
- Empathic understanding in an interpersonal interview situation. Thomas G. Macfarlane, Long Beach State College.
- An investigation of psychoanalytic displacement. W. H. Blanchard, VA Mental Hygiene Clinic, Los Angeles.
- An evaluation of some proposed tests of suggestibility. IRA M. STEISEL, University of Washington.
- Personality correlates of social conformity. II.

 RAYMOND E. BERNBERG, Los Angeles State College.

Sensation and Perception

Douglas Lawrence, Chairman

- Variables affecting the angular displacement threshold of simulated auditory movement. R. C. Wilcott, University of Southern California and U. S. Navy Electronics Laboratory, San Diego.
- The effect of effort on response in a psychophysical context. Robert L. Batterton, Naval Personnel Research Field Activity, San Diego.
- The reliability of olfactory thresholds obtained by a simple sniffing technique. F. Nowell Jones, University of California, Los Angeles.
- Introversion and perceptual accuracy. John A. Starkweather and Richard S. Crutchfield, Institute of Personality Assessment and Research.
- Visual and auditory closure. Benjamin W. White, George Washington University.
- An experimental investigation of the phenomenon of "double pain." Margaret Hubbard Jones, University of California, Los Angeles.
- The reliability of pain thresholds as obtained from random and repeated spots. Betty A. Wieland and William H. Bame, *University of California*, Los Angeles (introduced by F. Nowell Jones).
- Stimulus patterning resulting from the presentation of electronic signals in combined aural and visual displays. Joseph W. Rigney, *University of Southern California* (introduced by William W. Grings).

Statistics and Methods

ALLEN EDWARDS, Chairman

- Some experiments and related theory in the measurement of utility and subjective probability. Patrick Suppes, Donald Davidson, and Sidney Siegel, Stanford University (introduced by Robert R. Sears).
- A study of the error in the cosine-pi approximation to the tetrachoric coefficient of correlation. Eugene A. Bouvier, University of Southern California, Norman C. Perry, Alabama Polytechnic Institute, William B. Michael, University of Southern California, and Alfred F. Hertzka, Navy Personnel Field Activity, San Diego (introduced by William B. Michael).
- A theory of item analysis relative to the scoring of test items at three levels of appropriateness of response. William B. Michael, *University of Southern California*, and Norman C. Perry, *Alabama Polytechnic Institute*.
- An empirical study of errors in estimates of item difficulty obtained from use of extreme groups on a criterion variable. Robert A. Jones and William B. Michael, *University of Southern California* (introduced by William B. Michael).
- Some methods of pattern analysis. James B. Mac-Queen and Samuel R. Pinneau, *University of Oregon* (introduced by Samuel R. Pinneau).
- Nomographs for testing the significance of differences between uncorrelated proportions. Burton O. Boyd, *University of Oregon* (introduced by Samuel R. Pinneau).
- The evaluation of training and transfer programs in terms of efficiency measures. Douglas H. Lawrence, Stanford University.
- A new method for obtaining weighted composites of ratings. H. F. DINGMAN AND J. P. GUILFORD, University of Southern California.
- An abbreviated technique for machine tabulation and hand calculation of eta and Pearson coefficients of correlation. Cecil R. Miller, University of California, Los Angeles.
- Methods of scoring ordering tasks. Philip R. Merrifield, *University of Southern California* (introduced by J. P. Guilford).

Personality II

CHARLES M. HARSH, Chairman

- The male homosexual—a personality type? EVE-LYN HOOKER, University of California, Los Angeles.
- A psychological study of American jet aces. E. PAUL TORRANCE, Stead Air Force Base, Reno, Nevada.
- Stress reactions of stutterers and nonstutterers. WILLIAM H. ROSEVEAR AND JOSEPH G. SHEEHAN, *University of California*, *Los Angeles* (introduced by Joseph G. Sheehan).
- Assessment and evaluation of catastrophic interviews. David P. Boder, University of California, Los Angeles.
- A study of relationships between social service interest and personality. John E. Westeen, *University of Southern California*.
- Certain determinants and correlates of authoritarianism. Sidney Siegel, Stanford University (introduced by Paul R. Farnsworth).
- Two personality profiles associated with cardiovascular measures. James C. Lingoes, Robert E. Harris, Langley Porter Clinic, University of California, San Francisco, and Starke R. Hathaway, University of Minnesota (introduced by Robert E. Harris).
- Some personality correlates of the ability to judge others. VICTOR B. CLINE, Human Research Unit No. 2, Fort Ord, California.

Applied I

NEIL WARREN, Chairman

- A simplified method of computing the effectiveness of tests in selection. IVAN N. McCollom, San Diego State College.
- The relative efficiency of different types of items in special purpose interest tests. Milton G. Holmen, Human Research Unit No. 2, Fort Ord, California.
- A study in the selection of clerical workers. JAY T. RUSMORE, San Jose State College, AND FRED MARTIN, Food Machinery Corporation.
- A teacher prognosis scale on the MMPI. J. C. Gowan, Los Angeles State College, and May Seagoe Gowan, University of California, Los Angeles.

- A clinical group-testing battery for selecting psychiatric aides. HARRY M. GRAYSON, VA Neuro-psychiatric Hospital, West Los Angeles.
- Prediction of accident rates of Air Force pilots.

 Neil D. Warren and Robert F. Simmons,

 Psychological Services, Inc., Los Angeles.

Learning I

CALVIN W. THOMSON, Chairman

- Need reduction and primary reinforcement: intragastric discrimination. PAUL B. PORTER, University of Utah.
- Need reduction and primary reinforcement: a comparison of the reinforcing value of sugar and saccharine. Calvin W. Thomson, New Mexico College of Agricultural and Mechanical Arts.
- General hunger and learning-to-eat in the albino rat. L. T. RUTLEDGE, JR., University of Utah.
- The relationship between drive and habit under three levels of hunger deprivation in a black-white discrimination problem. Eugene Eisman, Adele Asimow, and Irving Maltzman, University of California, Los Angeles.
- The effect of stomach preloading on the rate of a bar-pressing response. Moncrieff Smith and Michael Duffy, *University of Washington*.
- Hoarding and aggressive behavior in rats. John S. Stamm, California Institute of Technology.
- The effect of delay of knowledge of results on performance of a motor task. Sally Foreman and Joel Greenspoon, *Pomona College* (introduced by Joel Greenspoon).
- Conditioned reflexes acquired during experimentally induced catatonia in cats (film). EDWARD C. BECK AND ROBERT W. DOTY, University of Utah (introduced by Paul B. Porter).

Child Development

HAROLD E. JONES, Chairman

- The importance of the neonatal period to mother and child. George Davenport Brown, Berkeley, California (introduced by Harold Jones).
- Regurgitation in infants as related to psychological variables. Harold E. Hopper and Samuel R. Pinneau, *University of Oregon* (introduced by Samuel R. Pinneau).

- An analysis of the human figure drawings of orthopaedically handicapped children. Martha D. Pottenger and Everett L. Shostrom, *Pepper-dine College* (introduced by Everett L. Shostrom).
- Children's conceptions of body size. Allan Katcher, University of Washington, and Max M. Levin, National Institute of Mental Health, Bethesda, Maryland.
- A development study of persistence, change, and recurrence of behaviors over certain age periods.

 MARJORIE P. HONZIK, University of California, Berkeley.
- The use and control of oral language by three hundred kindergarten pupils. Walter Loban, University of California, Berkeley.
- A study of the oral and written language of children in the intermediate elementary grades. Murray Tondow, Kern County Schools.
- A comparison of laboratory determinations and Wetzel Grid estimates of basal metabolism among adolescents. Dorothy H. Eichorn, *Institute of Child Welfare*, *University of California*, *Berkeley*.
- The development of an annoyance inventory and its application to the study of personality in adolescence. Louis Stewart, *Institute of Child Welfare*, *University of California*, *Berkeley*.

Social

LAUNOR F. CARTER, Chairman

- A study of the effects of forced group activity on terminal students. Melvin Dunn and IJA N. Korner, University of Utah College of Medicine.
- Some attitudes toward the older worker and his role. ROBERT ALLEN KEITH, Claremont Graduate School.
- An experimental study of the influence of attitudes toward persons upon attributive accentuation effects with respect to surrogates for such persons. Jesse H. Harvey, Fresno State College.
- Attitude formation: the development of a color preference response through mediated generalization. Bernice S. Eisman, University of California, Los Angeles.
- Attitude change as related to perceived consensus.

 MARTHA STURM WHITE, Carmel, California.

- Rational appearing argument and prestige suggestion as factors influencing judgment. David L. Cole, Occidental College.
- The relationship of reported overt behavior to social status. Alexander Milton, Stanford University, and Samuel R. Pinneau, University of Oregon (introduced by Samuel R. Pinneau).
- A factor analysis of criterion oriented ratings. ROBERT V. KATTER, Human Research Unit No. 2, Fort Ord, California (introduced by Milton G. Holmen).
- Personality correlates of leadership. Ann M. Jones, Human Research Unit No. 2, Fort Ord, California (introduced by Milton G. Holmen).
- Some aspects of commonality of social perception. IRVING F. RICHARDSON, Human Research Unit No. 2, Fort Ord, California (introduced by Milton G. Holmen).

Clinical I

ROBERT D. BOYD, Chairman

- A study of the efficiency of the MMPI for screening college women. John D. Black, Stanford University.
- Comparison of the MMPI profile shapes of several nosological groups. J. A. Gengerelli, *University of California*, *Los Angeles*.
- Psychological test patterns in pulmonary tuberculosis. MAY RICH, Charles Cook Hastings Home, Altadena.
- A study of the psychological characteristics of patients on a tuberculosis service as related to prediction of AWOL discharge. H. Elston Hooper, Long Beach VA Hospital.
- Replication of Becker's lobotomy prognosis study.
 R. L. McFarland, W. C. Becker, K. P. Jones,
 AND MARY HANSEN, VA Hospital, Palo Alto.
- Premorbid intelligence of psychiatric patients. Charles F. Mason, VA Hospital, Long Beach.
- Associative flexibility in the Wechsler-Bellevue and its relationship to disposition rigidity. GILWEE WALKER, Long Beach State College (introduced by Thomas G. Macfarlane).
- Smoking habits in psychiatric disorders. IRVING R. STONE AND BENJAMIN B. FAGUET, San Diego, California.

- Healthy interaction: a composite clinical picture.

 JOSEPH LUFT, University of California School of
 Medicine and Langley Porter Clinic, San Francisco.
- Unconscious assignment of signaling behavior in interpersonal communications. George R. Васн, Beverly Hills, California.

Learning II

JOHN KENNEDY, Chairman

- The effect of two verbal stimuli on the frequency of members of two verbal response classes. Joel Greenspoon, *Pomona College*.
- The effect of relaxation on the recall of nonsense syllables, words, and poetry. Dorothy V. Anderson, University of California, Los Angeles.
- The learning of material symbolically related to motivation. John B. Marks, VA Hospital, American Lake, Washington (introduced by James C. Stauffacher).
- Mediated transfer of GSR as a function of magnitude of GSR and associative strength. Alfred Jacobs and William Grings, *University of Southern California*.
- Factors determining the serial order and frequency of reoccurrences of multiple associations to stimulus words. I. Abou-Ghorra and Alfred Jacobs, *University of Southern California*.
- The formation of new associations to strongly emotional and to neutral words when familiarity of the words is controlled. M. Mendel and A. Jacobs, *University of Southern California*.
- Evidence for relational transposition. Joseph DE RIVERA AND DOUGLAS H. LAWRENCE, Stanford University (introduced by Douglas H. Lawrence).
- Discrimination learning and amount of reinforcement. John W. Cullen, *University of California*, *Los Angeles* (introduced by J. A. Gengerelli).
- Functional independence of discrimination habits to the same stimulus situation. W. R. Goodwin, Stanford University (introduced by Douglas H. Lawrence).
- An attempt to obtain pupillary conditioning with infrared photography. Francis A. Young, State College of Washington.

Applied II

FLOYD L. RUCH, Chairman

- Relationships among different measures of electronics trouble-shooting skill. NICHOLAS A. BOND, JR., WILLIAM W. GRINGS, JOSEPH W. RIGNEY, AND STANLEY A. SUMMERS, University of Southern California.
- Measuring the ability to trouble shoot electronic equipment. Stanley A. Summers, William W. Grings, Joseph W. Rigney, and Nicholas A. Bond, Jr., *University of Southern California* (introduced by Glenn L. Bryan).
- Methodological problems in the construction and use of a method for the description of performance components of a technical job in an information system. WILLIAM AXELROD, JOSEPH W. RIGNEY, DONALD W. SVENSON, AND GLENN L. BRYAN, University of Southern California (introduced by Glenn L. Bryan).
- A card-sorting procedure for obtaining detailed job descriptions. GLENN L. BRYAN AND WILLIAM W. GRINGS, University of Southern California.
- An investigation of some of the factors influencing dial legibility. ROBERT L. KAREN, University of Southern California and U. S. Navy Electronics Laboratory, San Diego (introduced by Paul G. Cheatham).
- Teaching a complex perceptual skill with motion pictures. WILLIAM A. McCLELLAND, PRESTON S. ABBOTT, AND WILLIAM H. STOBIE, Mather Air Force Base.
- Interrelations of the methods of rank order and pair comparison by means of the constant-sun method. Milton Metfessel and Constance Lovell, University of Southern California.

Physiological

LAWRENCE N. MARX, Chairman

- The relation of palmar sweat to personality variables. Jerome E. Kristal and Samuel R. Pinneau, *University of Oregon* (introduced by Samuel R. Pinneau).
- An experimental electroencephalographic study of the effort to memorize meaningful auditory stimuli. Loriene Malamuth, Spastic Children's Foundation, Los Angeles (introduced by William B. Michael).

- The effect of pinhole observation on flicker fusion frequency in patients with brain pathology. James C. Stauffacher, John B. Marks, VA Hospital, American Lake, Washington, and Albert F. Ax, University of Washington.
- A preliminary study of irradiation in the rhesus monkey. R. W. Leary, A. D. Davis, and F. P. Leukel, *University of Washington*.
- Effect of brain stimulation rate during runs on maze performance in the white rat. J. A. Gengerelli And John W. Cullen, *University of California*, Los Angeles.
- Electroconvulsive shock and thermal preference of albino rats. William A. Mason, Stanford University (introduced by Calvin P. Stone).
- Hypophysectomized rats at work. Calvin P. Stone and Mariano L. Obias, Stanford University.

Clinical II

CHARLES H. HONZIK, Chairman

- Evaluation of a freshman group therapy project. EVERETT L. SHOSTROM AND LLOYD JAMES HEDSTROM, Pepperdine College.
- The application of Q methodology in investigating changes in self and ideal self as a result of a mental health workshop. Eli M. Bower and Peter J. Tashnovian, California State Department of Education.
- The nature of personality change in psychotherapy as revealed by the Rorschach. Joseph G. Sheehan, *University of California*, *Los Angeles*.
- Semantic abstractions in the counseling process.

 WILLIAM EUGENE GEISMAR, Pepperdine College
 (introduced by Richard Hogan).
- Activity group therapy: its use with schizophrenic patients. Phyllis Van Vleet, Berkeley, California.
- "Listening" by experienced and inexperienced therapists. Bernarr Mazo, Gerhart R. Sommer, and George F. J. Lehner, University of California, Los Angeles.
- Some new trends in Austrian psychotherapy. Paul J. Stern and George F. J. Lehner, *University of California*, Los Angeles.

Learning II

JOHN P. SEWARD, Chairman

- Response similarity in successive discrimination learning as a function of stimulus similarity. Herbert Gerjuov, State University of Iowa (introduced by Seymour L. Zelen).
- The effect of competing and irrelevant stimuli on selection of concepts. David E. Meister, U. S. Navy Electronics Laboratory, San Diego.
- Hypotheses concerning a new principle of reinforcement. G. RAYMOND STONE, Mather Air Force Base, California.
- Discrimination sets and the naming of stimuli.

 MAURICE S. SCHAEFFER AND IRMA R. GERJUOY,

 Child Welfare Research Station, State University

 of Iowa.
- Problem solving under conditions of massed and distributed effort. David L. Laberge and Donald W. Taylor, Stanford University.
- The relationship between level of aspiration and improvement in performance on a perceptual learning task. Donald H. Kausler, Mather Air Force Base, California.
- Evaluation of two group techniques in producing individual learning. Mario Levi and Albert C. Higgins, Stead Air Force Base, Reno, Nevada.
- The effect of response blocking during extinction of a response chain. James L. Morey, *University of Utah*.

Personality III

DAN L. ADLER, Chairman

- Falsification scales for the Guilford-Zimmerman Temperament Survey. Allan Schlaff and Alfred Jacobs, *University of Southern California*.
- The control of social desirability as a factor influencing responses to items in personality inventories. Allen L. Edwards, *University of Wash*ington.
- The effects of situational stress on paper-and-pencil personality tests. S. Leventer and A. Jacobs, University of Southern California.

Personality correlates of control tendencies in an industrial setting. Thomas W. Milburn, Stanford University, and Joseph Luft, University of California School of Medicine and Langley Porter Clinic, San Francisco (introduced by Joseph Luft).

Ego strength in normal subjects as measured by an MMPI scale. Frank Barron, University of California, Berkeley.

The relationship of reported overt behavior to psychological variables. Samuel R. Pinneau, *University of Oregon*, and Alexander Milton, *Stanford University*.

An experimental study of some factors influencing decision making in conflict situations involving risk. John M. Atthowe, Donald Davidson, Sidney Siegel, and Patrick Suppes, Stanford University (introduced by Robert R. Sears).

SYMPOSIA

The Functions and Training of School Psychologists

BEATRICE LANTZ, Chairman

Panel: Daniel W. Langston, Louis S. Levine, Charles E. Meyers, and Jean Walker Mac-FARLANE.

Psychology in Medical Education

CHARLES R. STROTHER, Chairman

Panel: Betty Kalis, Ija Korner, Norman Greenfield, Donald Lindsley, and Roy M. Dorcus.

Future Trends in Problem-Solving Research
DAVID E. MEISTER, Chairman

Panel: J. P. Guilford, Irving Maltzman, and Donald W. Taylor.

Group Therapy with Children

David H. Ruja, Chairman

Panel: Pearl L. Axelrod, Dorothy Baruch, Milner Clary, Simon J. Conrad, John W. Howe, and Steven Schwartz.

The Sources of World War III

RICHARD H. BLUM, Chairman

Panel: Joseph Cooper, Peggy Heim, William Strauss, and Eli Chertok.

Problems in Research on Leadership in Industry

RAYMOND E. BERNBERG, Chairman

Panel: M. Scott Myers, Doris V. Springer, Thomas W. Harrell, and Ralph R. Canter, Jr.

Psychological Factors in the Vocational Adjustment of Disabled Veterans

MILTON E. HAHN, Chairman

Panel: George F. Seacat, Frank Risch, Morse P. Manson, Wendell E. Eriksson, Ben B. Freeman, and Edward M. Alkire.

The Practice of Therapy in Institutional and Outpatient Settings

IRVING R. STONE, Chairman

Panel: David Ruja, Harvey Ross, Nathaniel Showstack, Joseph Cole, Glenn Wiest, and Burton Castner.

PROCEEDINGS OF THE TWENTY-SIXTH ANNUAL MEETING OF THE MIDWESTERN PSYCHOLOGICAL ASSOCIATION

LEE J. CRONBACH, Secretary-Treasurer
University of Illinois

HE Midwestern Psychological Association held its twenty-sixth annual meeting at The Neil House, Columbus, Ohio on April 30 and May 1, 1954, with 940 persons registered. The program consisted of 115 papers, including sessions on the customary topics of learning, personality, social, vision, and audition. Sufficient papers were received to warrant separate sessions on the new topics of probability learning and group performance. Symposia were scheduled on the following topics: Psychology in General Education, Psychology in Medical Education, A Theory of Psychological Measurement, Recent Developments in Semantic Measurement, Construct Validity in Psychodiagnostics, The Automobile Driver, Problems of Human Engineering, and "Can the Psychology of Learning be Applied?"

The presidential address, "Pleasure-Seeking Behavior and the Drive-Reduction Hypothesis," was delivered by Judson S. Brown of the State University of Iowa. The address was followed by a social hour.

The Program Committee consisted of Jay L. Otis, Chairman, Benton J. Underwood, Ivan N. Mensh, and Lee J. Cronbach. Local arrangements were under Delos D. Wickens, who was assisted by Alec J. Slivinske, Merrill E. Noble, Erwin J. Lotsof, Laurence Siegel, and Lauren G. Wispe. Carl Rush, Jr. and Michael Amrine of the APA Central Office assisted with placement and public information, respectively. Paul E. Meehl was elected President, and Julian B. Rotter was elected to the Executive Council for a three-year term. Continuing members of the Council are Marion E. Bunch and Benton J. Underwood, together with the Secretary-Treasurer.

The following persons were elected to life membership: R. M. Elliott, Earl E. Emme, Charles C. Josey, Harvey C. Lehman, Donald G. Paterson, Winona M. Perry, H. H. Remmers, L. V. Simpson,

Miles A. Tinker, and Thomas F. Vance. The business meeting accepted a total of 362 new members, bringing the total membership to 1,526. Business meeting discussion centered on two topics, the financial surplus of the Association and the program regulations. It was decided to reduce dues to \$1.25 per year, or to \$3.00 for three years when paid in advance. It was decided to continue the regulation that one author of every paper must be a member, and that no member may have his name on more than one paper. It was voted that when one author of a paper is a member, a nonmember may stand as senior author and read the paper. Council was authorized to elect persons applying before January 1, such persons then being eligible to submit papers for the annual program.

According to the standing practice of the Association, any APA member may automatically become a member of MPA by submitting his dues payment to the Secretary-Treasurer; persons joining under this provision prior to the 1955 program deadline may submit papers.

The following 263 APA members became MPA members during the year ending April 1:

Henry B. Adams Priscilla J. Alden Terrence M. Allen Herman D. Arbitman Harvard L. Armus Philip Ash Richard C. Atkinson Marc B. Baer A. R. Baggaley L. Max Baird Gerald W. Barnes Harold Basowitz Herbert J. Bauer Marian H. Baum Charles Bellavia Murray Benimoff Vernon Jon Bentz Ralph F. Berdie

Emanuel M. Berger Leonard Berkowitz James Bieri Fred Y. Billingslea John W. Black Royal F. Bloom Gerald S. Blum James G. Bond Marvin Brandwein Elaine B. Bregman Gladys Brenner Steuart Henderson Britt Donald V. Brown William E. Brown Charles H. Bumstead Thomas C. Burgess Raymond H. Burros Bettye M. Caldwell

Allen Calvin Donald T. Campbell Loretta Cass Margaret E. Cassel Robert H. Cassel Guinevere S. Chambers Ruth D. Churchill Conrad Chyatte Leonard Cohen Thomas Cohn Sarah Counts Meredith P. Crawford Thora H. Crowder Quin F. Curtis Lawrence E. Dameron Richard H. Dana Edwin W. Davis Douglas A. Dean Frederik de Wit Camille Di Bella Alfred G. Dietze Paul R. Dingman Donald G. Doehring Frances M. Douglass Stanley C. Duffendack Robert D. Dugan Frank M. du Mas Marvin D. Dunnette Ralph Dusek Jan E. R. Eindhoven Nathaniel H. Eisen Jack Elinson Albert Elkin Miriam Tate Elkin Olga Engelhardt Swan A. Engwall Robert E. Fager Nicholas A. Fattu Loren G. Fitzhugh Theodore W. Forbes Donald G. Forgays Earl X. Freed S. H. Friedman Joseph A. Garvin Delores J. Gavins G. M. Gilbert Charles R. Giroux Stanley Goldstein Brvna R. Graff Norman Graff Armin Grams Edward J. Green Ann Greenhut Edsel Ford Hale William M. Hales Roy M. Hamlin Morton Hammer Peter J. Hampton Irene E. Harms Walter Hartmann

William L. Hays

Sumner C. Hayward Martha Heaton Ann E. Heilman Leo A. Hellmer Austin C. Herschberger Frederick I. Herzberg Max L. Hillmer, Jr. Jeseph E. Hind E. P. Hollander James F. Horgan Bernice E. Horrall J. McVicker Hunt Walter F. Huppenbauer John R. Hurley Paul Imre William Itkin Durand F. Jacobs Frank N. Jacobson Eve S. John S. V. Kale Joe Kamenetzky Max R. Kaplan William E. Kappauf Harold E. Kerber Robert D. King Wayne K. Kirchner Virginia Kirk George R. Klare William A. Koppe Jacob S. Kounin Alfred B. Kristofferson Ellen A. Lane J. J. Lasky A. J. Latham Donald W. Lauer William G. Lawlor Joe L. Lawson, Jr. Lionel M. Lazowick Laura E. Lehtinen Mary M. Leichty Irving Leiden Milton Lepkin Abraham Levitsky Bernard I. Levy Leon H. Levy Donald Lewis Jane Lewis Jeanne E. Lipman Robert F. Long Howard I. Low William H. Lyle, Jr. Eugene F. MacCaslin Alvin R. Mahrer Rita M. Maloney Leslie F. Malpass John E. Mangelsdorf Phillip H. Margules Barclay Martin Evelyn P. Mason Russell E. Mason

Georgia Maxson

Raymond J. McCall Frank McGuigan Frank S. McKenna Robert F. Medina Samuel J. Meer Gilbert W. Meier Alicemarie Meyer Henry D. Meyer Raymond C. Miles Daniel R. Miller William H. Morgan Paul T. Mountjoy Myrtle C. Nash Ann F. Neel Kenneth G. Nelson Eva Neumann Donald P. Ogdon Howard C. Olson Abel G. Ossorio Jerry Osterweil Dan C. Overlade Horace A. Page H. Riley Patton Jerome D. Pauker David Pearl Robert M. Peterson Elizabeth A. Pillsbury M. Henry Pitts Roderick W. Pugh Maxwell S. Pullen Glenn V. Ramsey Charles K. Ramond Stanley C. Ratner Allan Rechtschaffen Michael M. Reece Homer Reed, Jr. Otto M. Riedl David Rigler Henry D. Rinsland David W. Rodgin Albert Rosen Seymour Rosenberg Sol S. Rosenberg Sidney Rosenblum Mandel Rubin Erwin D. Russell Harold E. Russell John Ryan Laurance E. Saddler B. B. Scarborough Donald P. Scharlock Max S. Schoeffler

Virginia E. Schoen Henry Schoenfeld, Jr. Herman J. P. Schubert Charles F. Schumacher Reuben H. Segel E. W. Senderling James N. Shafer Carl E. Sherrick, Jr. Laurence Siegel Marianne L. Simmel Stanford H. Simon Henry L. Sisk Alec J. Slivinske Henry Clay Smith Mark W. Smith C. D. Spielberger Marvin Steinberg John A. Stern Glen Stice George C. Stone Murray S. Stopol Bernard Stotsky Blanche Sweet Merrell E. Thompson Edward J. Thwing R. H. Tindall Vernon S. Tracht David K. Trites Ernest C. Tupes Forrest B. Tyler James M. Vanderplas Manuel J. Vargas Kenneth W. Vaughn William D. Voiers Paul I. von Ebers Leo O. Walder Earl A. Waller William W. Wattenberg LeRoy A. Wauck Paul S. Weiner Joseph M. Wepman Elizabeth L. Wesley William C. Westberg Elsa A. Whalley Elizabeth R. Whitehouse Kate S. Wolfson C. F. Wrigley Frederick Wyatt George J. Yoxall Thornton W. Zeigler Seymour L. Zelen Maurice J. Zemlick

The following 99 applicants were elected to membership:

Norman L. Alberts Norman Anderson Nancy Angrist Arvord W. Belden Gershon Berkson

Merrill Beyerl John Binford Wesley Blair Margaret Body Willard Brigner

Arnold McDowell
Manfred J. Meier
Philip Meighan, Jr.
Robert F. Mengelkoch
Matthew Mermelstein
John F. Mesinger
Rolland Metzger
Marilyn E. Miller
John A. Modrick
Antonia Bell Morgan
Jerome Myers
Charles Noty
Charles O. Nystrom
Ann O'Halloran
Robert Phelan
Jeanne S. Phillips
Robert Pratt
John Proctor
Benjamin Publos, Jr.
Carl L. Roberts
Richard Rosensteel
Stanley A. Rudin
Willard N. Runquist
Barbara R. Sarason
Irwin Sarason
Jack Sawyer
Robert Seibel
Carl Avrom Silver
Maynard W. Shelly, II
Paul Singer
J. E. Keith Smith
Edward A. Stark
Gary Steiner
Raymond Stokes
Arthur R. Thomas
Frank V. Touchstone
David Tucker
Elliot S. Valenstein
Milton M. Varsos
Ann Vermilion
James Voss
Josephine Walker
Lawrence Walker
James E. Wiechers
Darvin Winick

PROGRAM

Abstracts of papers have been deposited with the ADI Auxiliary Publications Project, Photoduplication Service, Library of Congress, Washington 25, D. C., as Documents No. 4257-4273. When ordering, remit the price listed below for photoprints or 35 mm. microfilm, using check or money order payable to: Chief, Photoduplication Service, Library of Congress. Advance payment is required.

Title	ADI No.	Microfilm	Photoprint
Anxiety	4273	\$1.25	\$1.25
Personality	4272	\$1.75	\$2.50
Clinical	4271	\$1.75	\$2.50
Group Performance	4270	\$1.75	\$2.50

Title	ADI No.	Microfilm	Photoprint
Social	4269	\$1.75	\$2.50
Measurement	4268	\$1.25	\$1.25
Education and Training	4267	\$1.75	\$2.50
Educational	4266	\$1.75	\$2.50
Motor Learning	4265	\$1.25	\$1.25
Animal Learning II	4264	\$1.75	\$2.50
Animal Learning I	4263	\$1.75	\$2.50
General Human Learning	4262	\$2.00	\$3.75
Probability Learning	4261	\$1.75	\$2.50
Audition	4260	\$1.25	\$1.25
Vision II	4259	\$1.25	\$1.25
Vision I	4258	\$1.75	\$2.50
Physiological	4257	\$1.75	\$2.50

Anxiety

MAX L. HUTT, University of Michigan, Chairman

JEANNE S. PHILLIPS AND JOSEPH D. MATARAZZO, Washington University School of Medicine. Digit-symbol performance as a function of increasing levels of anxiety.

DONALD R. MEYER AND MERRILL E. NOBLE, Ohio State University. The effects of induced muscular tension upon the verbal maze performance of individuals rated high or low in manifest anxiety.

JOHN R. HURLEY, University of Louisville. Influence of personality measures and differentially motivating instructions on performance during verbal learning.

HARRY W. BRAUN AND EDWARD J. CARNEGIE, University of Pittsburgh. Serial perceptual-motor learning as a function of anxiety.

GEORGE W. MALLOW AND MARTIN R. BARON, Kent State University. The effect of competing response tendencies in paired-associate learning with anxious and nonanxious subjects.

Personality

CHARLES A. DAILEY, VA Hospital, Jefferson Barracks, Mo., AND FRED McKINNEY, University of Missouri, Chairmen

BARCLAY MARTIN, University of Wisconsin, AND JEANNE H. BLOCK, Berkeley, California. Individual differences in children's frustration behavior.

EVELYN P. MASON, Washington University School of Medicine. Some factors in self-judgments.

MICHAEL M. REECE, Wayne University. Escape availability and perceptual defense.

- WILLIAM F. SOSKIN AND PAUL E. KAUFFMAN, *University of Chicago*. Some psychological characteristics of filtered speech.
- Charles F. Schumacher and others, *Iowa State College*. Differential characteristics of "creative" and "noncreative" machine designers.
- Ross Stagner and Charles Solley, *University* of *Illinois*. Barrier behavior as a joint function of type of goal, magnitude of barrier, and perception of self.
- FORREST B. TYLER, Southern Illinois University. The influence of two factors on the learning of rigid-nonrigid behavior.
- ELIZABETH G. FRENCH, Personnel Research Laboratory, AFPTRC. Interrelation between some measures of rigidity under ego-involved and relaxed conditions.
- GLEN STICE AND RAYMOND B. CATTELL, University of Illinois. The role of inheritance in determining primary personality dimensions: a twin study.

Clinical

- FRANKLIN J. SHAW, Purdue University, Chairman
- RALPH M. REITAN, Indiana University School of Medicine. The effect of laterality of cerebral lesions on Wechsler-Bellevue results.
- EARL C. Brown, VA Center, Wadsworth, Kansas. A factor analysis of projective, electroencephalographic, and metabolic variables.
- WILSON H. GUERTIN, VA Hospital, Knoxville, Iowa. A transposed factor analysis of schizophrenic performance on the Bender-Gestalt.
- Frank M. Du Mas, *Michigan State College*. Clinical statements as scientific propositions and social decisions.
- CHARLES A. DAILEY, VA Hospital, Jefferson Barracks, Mo. Relation between perception of surroundings and degree of cerebral pathology.
- Leonard D. Goodstein, State University of Iowa. Regional differences in MMPI responses among male college students.

Group Performance

- HENRY W. RIECKEN, University of Minnesota, Chairman
- LEONARD BERKOWITZ, Crew Research Laboratory, AFPTRC. The perception of group attitudes as related to criteria of group effectiveness.

- JOHN K. HEMPHILL AND CHARLOTTE A. CHRIST-NER, Ohio State University. Leader behavior of B-29 aircraft commanders as related to changes in crew members' attitudes toward the crew.
- KERMIT J. RHODE, Ohio State University. An evaluation of the extent to which the task ability of the man in charge of a group is determinative of that group's success in performing the task.
- SEYMOUR ROSENBERG, Crew Research Laboratory, AFPTRC, AND DWIGHT E. ERLICK, University of Massachusetts. The effects of varying combinations of persons on group performance measures.
- BERNARD I. LEVY, Crew Research Laboratory, AFPTRC. Some effects of periodic discussions upon the social characteristics of nonlaboratory groups.
- WILLIAM D. VOIERS, Crew Research Laboratory, AFPTRC. The interaction of individual proficiency factors in simulated radar bombing accuracy.
- Donald G. Forgays, Crew Research Laboratory, AFPTRC. Criteria of bomber crew performance in combat.

Social

- JOHN HEMPHILL, Ohio State University, Chairman
- HARRY A. GRACE, Michigan State College. The effect of information upon hostility.
- George C. Stone and George S. Leavitt, *University of Illinois*. Generality of accuracy in perceiving standard persons.
- E. P. HOLLANDER, Carnegie Institute of Technology, AND WILSE B. WEBB, U. S. Naval School of Aviation Medicine. A study of the relationship between sociometrically derived measures of leadership, followership, and friendship.
- DONALD N. ELLIOTT, Wayne University, AND LEONARD M. SEALE, Ohio State University. Frustration and initial aggressive tendencies and their relation to minority-group labeling behavior.
- Rossall J. Johnson, *Northwestern University*. Relationship of employee morale to ability to predict responses.
- Graham B. Bell and Rhoda Stolper, Louisiana State University. An attempt at direct validation of Kerr's Empathy Test.

ROBERT G. NEEL, University of Kansas City, AND ANN F. NEEL, VA Hospital, Kansas City, Mo. The development and validation of a picture technique for measuring attitude toward the Negro.

Measurement

- VIRGINIA L. SENDERS, Antioch College, Chairman
- ERWIN K. TAYLOR AND DOROTHY E. SCHNEIDER, Western Reserve University. The correlational equivalence of a rational and an empirical criterion.
- HAROLD L. RAUSH, DAVID RIGLER, ZANWILL SPER-BER, AND JOAN V. WILLIAMS, University of Michigan. A dimensional analysis of depth of interpretation.
- P. RATOOSH AND H. J. RYSER, *Ohio State University*. An application of matrix theory to the analysis of group structures.
- CHARLES WRIGLEY, University of Illinois, DAVID R. SAUNDERS, Educational Testing Service, AND JACK O. NEUHAUS, University of Illinois. The application of an analytical method of rotation to Thurstone's Primary Mental Abilities test battery.

Education and Training

- W. A. OWENS, JR., Iowa State College, Chairman
- ALLEN R. SOLEM, North Carolina State College.

 An experimental test of two theories of involvement in role playing.
- R. M. MALONEY, Ohio State University. Group learning through group discussion: group-discussion implementation analysis.
- ARTHUR KAHN, Naval Research Laboratory, Washington, D. C. The human operator as a linear element in a servo system.
- EUGENE F. MacCaslin and F. J. McGuigan, Army Field Forces Human Research Unit No. 1. A comparison between the whole method and the part method in the acquisition of a complex perceptual-motor skill, rifle marksmanship.
- J. Jepson Wulff, Training Aids Research Laboratory, AFPTRC, and Lawrence M. Stolurow, University of Illinois. A comparison of three ways to teach identification of coded stimulus features.

Educational

- ROBERT GLASER, American Institute for Research, Chairman
- JOHN P. PAISIOS AND H. H. REMMERS, Purdue University. A factor analysis of the SRA Youth Inventory.
- N. L. GAGE AND G. M. Della Plana, *University* of *Illinois*. Validity of the Minnesota Teacher Attitude Inventory as a function of pupils' values.
- Kenneth G. Nelson and Rosalind Mentzer, Michigan State College. Problems in personal and family living of Michigan high school students.
- WILLIAM H. LYLE, Jr., State University of Iowa. Punitiveness, authoritarianism, and parental disciplinary methods of elementary school children.
- MARY M. LEICHTY, Lansing Board of Education. Negativism and the use of white space by non-achieving readers.
- Armin Grams, *De Paul University*. A multitechnique approach to differences in the emotional adjustment of advanced and retarded readers.
- HAROLD E. RUSSELL, Ohio Juvenile Diagnostic Center, AND A. W. BENDIG, University of Pittsburgh. Development of a test of criminal cant.

Motor Learning

- GORDON ECKSTRAND, Aero-Medical Laboratory,
 Chairman
- ROBERT SEIBEL, State University of Iowa. The relative permanence of the decrement in motor performance after practice under massed conditions.
- EDWARD A. BILODEAU, Perceptual and Motor Skills Research Laboratory, AFPTRC. Rate of recovery in a repetitive motor task as a function of successive rest periods.
- INA McD. BILODEAU, Perceptual and Motor Skills Research Laboratory, AFPTRC. Self-paced rest with variation in work loading and duration of prerest practice.
- R. B. Ammons, *University of Louisville*. Effects of rate requirements on acquisition and performance of a simple motor skill.

Animal Learning II

- HAROLD COPPOCK, University of Oklahoma, Chairman
- STANLEY C. RATNER, *Indiana University*. Effect of prior extinction of dipper approaching on subsequent extinction of bar pressing and dipper approaching.
- HORACE A. PAGE, University of Wisconsin. The facilitation of experimental extinction by response interruption as a function of the acquisition of a new response.
- M. U. Eninger, Carnegie Institute of Technology. Magnitude of reward discrimination in a three-choice problem.
- Kenneth M. Michels, *Purdue University*. The effects of fixed-ratio random reinforcement on response latency of monkeys.
- CARL L. ROBERTS, ROBERT L. HENDERSON, AND MELVIN H. MARX, *University of Missouri*. Light as a reinforcer following operant training in the dark.
- JOHN B. FINK AND EUGENE ROACH, University of Louisville. Latent learning in an operant conditioning situation.

Animal Learning I

- E. James Archer, University of Wisconsin, Chairman
- ARTHUR J. RIOPELLE, Emory University. Discrimination reversal to signs.
- RAYMOND W. FRANKMANN, *Indiana University*.

 Rate of learning of successive discrimination reversals as a function of trial spacing.
- HARRY F. HARLOW AND NANCY M. CHYLE, University of Wisconsin. The influence of amount of differential color area on the discrimination of planometric stimuli by naive rhesus monkeys.
- GERALD E. McClearn, *University of Wisconsin*. The role of spatial contiguity in discrimination learning by monkeys.
- CHARLES C. PERKINS, JR. AND DANIEL B. REIN-HOLD, Kent State University. Stimulus generalization following simple and differential conditioning.
- Sheldon J. Lachman, Wayne University. Stereotype and variability of behavior in a free-choice multiple-path elimination problem.

- J. A. DINSMOOR, G. R. JOHNS, N. D. KENT, W. B. SIMON, AND GEORGIA O. WINDMAN, *Indiana University*. Electric shock as a secondary reinforcer for the correct response in Muenzinger's studies of discrimination learning.
- ALEXANDER J. DARBES, Cleveland State Hospital.

 An experimental investigation of cognitive maps in the mouse: I. Differences in cognitive-map formation as a function of age and training.

General Human Learning

- ARTHUR J. RIOPELLE, Emory University, AND CALVIN S. HALL, Western Reserve University, Chairmen
- IRVING J. SALTZMAN AND RITA L. ATKINSON, *Indiana University*. The difference between intentional and incidental learning scores after different numbers of stimulus presentations.
- DAVID A. GRANT, *University of Wisconsin*. Autocorrelation analysis of pursuit-rotor gross learning scores.
- NOEL F. KAESTNER, University of Wisconsin.

 Transfer of training in tracking as a function of the predictability of unidimensional target courses.
- H. P. BECHTOLDT, F. FOUT, AND C. THOMSEN, State University of Iowa. Remote associations and the serial-position curve.
- E. James Archer and Frederick G. Brown, University of Wisconsin. Short-interval retention of serial nonsense syllables as a function of stage of practice and rate of presentation.
- GEORGE E. BRIGGS, Northwestern University. Acquisition, extinction, and recovery functions in retroactive inhibition.
- GERALD ROSENBAUM, Wayne University, AND ROB-ERT H. CURTIS, Pontiac State Hospital. The effects of differential verbal mediation on stimulus generalization of a voluntary response.
- STANFORD H. SIMON, VA Hospital, Tomah, Wisconsin. Response-mediated generalization with simple skeletal-motor responses.
- Marian H. Baum, Oberlin, Ohio. Intraconcept discriminability as a factor in learning simple concepts.
- Joseph B. Sidowski, *University of Wisconsin*. Influence of awareness of reinforcement on verbal conditioning.

- T. E. COTTERMAN AND DELOS D. WICKENS, Ohio State University. Interaction of compatible and incompatible stimulus-response relations in learning situations.
- M. E. FITZWATER AND RANDOLPH S. THRUSH, Bowling Green State University. The acquisition of a conditioned response as a function of forward temporal contiguity.

Probability Learning

- MARION E. BUNCH, Washington University, Chairman
- EDITH D. NEIMARK, *Tulane University*. A factorial analysis of resistance to extinction in two verbal conditioning situations.
- C. J. Burke, *Indiana University*. Effects of variability in stimulation on learning rate.
- JOHN A. MODRICK, *University of Michigan*. The influence of incentives and "outguessing the experimenter" on partial-reinforcement learning.
- W. K. Estes, *Indiana University*. Stimulus control of resistance to extinction in human discrimination learning.
- HARRY L. MADISON AND MARCIA D. MADISON, *Indiana University*. Restricted randomization in a random-reinforcement situation.
- James H. Straughan, *Michigan State College*. An application of statistical learning theory to an escape-learning situation using human subjects.
- CLYDE E. NOBLE, *Louisiana State University*. Compound trial-and-error learning as a function of response availability.
- ROBERT M. PETERSON, University of Wisconsin. Acquisition and extinction of conditional eyelid responses as a function of percentage of reinforcement and intensity of the UCS.
- BRUCE CARPENTER AND DAVID BAKAN, University of Missouri. Some functional relationships in risk taking.

Audition

- JAMES P. EGAN, Indiana University, Chairman
- ARNOLD M. SMALL, JR. AND WILLARD R. THUR-LOW, *University of Wisconsin*. Loudness relations in two component tones.

- EDWARD J. THWING, *Indiana University*. Highpass frequency distortion as an aid in discrimination of simultaneous messages.
- Carl A. Silver and John W. Black, *Ohio State University*. Shift of pitch as a function of a narrow band of noise; a further investigation of the Egan-Meyer effect.
- EDWARD C. CARTERETTE AND JAMES P. EGAN, *Indiana University*. A comparison of the intelligibility of synchronous messages for nonaural and dichotic conditions of listening.
- Lowell M. Schipper, Ohio State University. An analysis of information transmitted to human observers with auditory signals as a function of number of stimuli and stimulus-intensity interval size.
- IRA J. HIRSH, Central Institute for the Deaf. Clinical application of Fechner's law.

Vision II

- A. LEONARD DIAMOND, Northwestern University, Chairman
- ROBERT E. MORIN AND CHARLES O. NYSTROM, University of Wisconsin. Temporal predictions of motion inferred from intermittently viewed light stimuli.
- H. LEIBOWITZ AND J. F. LOMONT, University of Wisconsin. The effect of luminance and duration of exposure of thresholds for the perception of movement.
- F. A. Mote, University of Wisconsin. The reliability of measurements of human dark adaptation.
- OSCAR S. ADAMS AND DAVE J. CHAMBLISS, *Emory University*. Stimulus area, stimulus dispersion, flash duration, and the scotopic threshold.
- ALEC J. SLIVINSKE, *Ohio State University*. The amount of information in absolute judgments of three visual-coding dimensions.
- C. H. Ammons, University of Louisville. Effects of distribution of practice and interpolated activity on learning of a visual-perceptual response.

Vision I

- LEE GREGG, Carnegie Institute of Technology, Chairman
- ETHEL ANN SHIELDS, Northwestern University.

 Apparent brightness as a function of area and intensity at suprathreshold levels of intensity.

- A. Leonard Diamond, Northwestern University. Foveal simultaneous brightness contrast as a function of inducing-field area and luminance.
- HELEN SCHEIBLE, Northwestern University. A comparison of psychophysical methods in the investigation of foveal simultaneous brightness contrast.
- GARTH J. THOMAS, University of Chicago. Comparison of uniocular with binocular CFF, simultaneous and alternate flashes.
- George Rex Hurt, Beatty Memorial Hospital, Westville, Indiana. Peripheral and central aftereffects of prolonged inspection of apparent movement.
- Kenneth T. Brown, Aero-Medical Laboratory.

 Factors affecting rate of apparent change of an ambiguous figure as a function of observation time.
- J. E. MANGELSDORF AND P. M. FITTS, Ohio State University. Accuracy of the joint extrapolation of two straight lines as a function of length of line.

Physiological

GARTH J. THOMAS, University of Chicago, Chairman

- ARNOLD A. McDowell, University of South Dakota. The immediate effects of single-dose whole-body x-radiation upon the free manipulation and the general activity level of caged rhesus monkeys.
- R. T. Davis, *University of South Dakota*. Performance of rhesus monkeys on non-food rewarded tasks before and after whole-body x-radiation.
- CONRAD CHYATTE, De Paul University. The significance of electrocortical activity in perception.
- GILBERT W. MEIER, Vanderbilt University. Delayed effects of natal anoxemia upon behavior.
- Lawrence M. Baker and Geza A. Csapo, *Purdue University*. Physical variables of apparent significance in galvanic skin response.
- CHRISTINE KRIS, University of Chicago and Illinois Institute of Technology. On variations in metabolic state and the rate of alternation during prolonged Necker cube fixation.

PROCEEDINGS OF THE TWENTY-FIFTH ANNUAL MEETING OF THE EASTERN PSYCHOLOGICAL ASSOCIATION

GORHAM LANE, Secretary

University of Delaware

HE twenty-fifth annual meeting of the Eastern Psychological Association was held on April 9 and 10, 1954, at the Hotel New Yorker, New York City. A total of 1,857 persons registered at the meeting. Of these, 1,034 were members of the Association, 571 were guests, and 252 were new members who joined the Association at the meeting. The present active membership of the Association totals 2,487.

Richard P. Youtz was in charge of local arrangements for the meeting. He was assisted by Margaret Benedict, Ralph Hefferline, W. E. Jeffrey, Conrad Mueller, E. J. Shoben, and Bernice Wenzel. The Program Committee, consisting of Eliot Stellar, chairman; Douglas Courtney, and E. J. Shoben, scheduled 156 scientific papers (presented in 21 sessions), 5 symposia, and 3 special meetings. Harold Schlosberg presented the annual Presidential Address entitled "Fatigue, Effort, and Work Output."

Among the more significant items transacted at the Annual Business Meeting and at the Board of Directors Meeting were the following:

- 1. B. F. Skinner was elected President (1954-55) and Carl Pfaffmann and Richard L. Solomon were elected to the Board of Directors (1954-57).
- 2. The following appointments were made: Committee on Local Arrangements, W. C. H. Prentice, chairman; Program Committee, Malcolm G. Preston, to serve with Eliot Stellar, and E. Joseph Shoben, chairman; Membership Committee, K. C. Montgomery, to serve with Andrew H. Souerwine; Elections Committee, Walter S. Hunter, to serve with Harold Schlosberg; Auditing Committee, Harold Gulliksen and C. C. Pratt; Representative to AAAS Council, Neal E. Miller, to serve with Herbert W. Rogers; and Representatives to the American Academy of Political and Social Science, Wayne Dennis and Douglas Courtney.
 - 3. It was announced that the 1955 meeting will

be held at the Benjamin Franklin Hotel in Philadelphia on April 15 and 16.

- 4. Nine non-APA members were approved for membership and three were rejected.
- 5. The Association voted to express its thanks to the Committee on Local Arrangements.
- 6. Several announcements of interest to the membership were made as follows: (a) Special interest session on Psychology and Tuberculosis in Atlantic City, May 17–21, 1954; (b) Program of the Inter-American Society of Psychology; and (c) International Congress of Psychology in Montreal in June 1954.
- 7. The interim report and budget were presented by the Treasurer, Norman O. Frederiksen. Both reports were approved. The Treasurer's audited financial statement for the fiscal year 1953–54 follows:

FINANCIAL STATEMENT AS OF MAY 1, 1954 For the Fiscal Year 1953-1954

INCOME Membership dues \$2,156.00 Exhibitors fees * Guest fees 571.00 Sale of programs 32.65 Interest on savings account 61.64 Total income \$3,336.29 EXPENDITURES Fee to APA for placement service \$ 100.00 Publication of proceedings Office of the Secretary 1,400.00 Office of the Treasurer Printing, supplies, postage, telephone ... 940.38 Program committee 58.19 Travel expenses of officers Miscellaneous Expenses for annual meeting 490.54 Total expenditures \$3,418.66 Deficit for 1953-54 \$ 82.37 * Includes \$25.00 from 1953 meeting.

BALANCE SHEET

Cash:	Bank of New York	\$1,608.89
	New York Savings Bank	2,387.87

Total cash\$3,996.76

Capital: As of May 1, 1953 \$4,079.13 Deficit for 1953–54 82.37

Total capital \$3,996.76

We, the Auditing Committee for the year 1953-54, have examined the records in connection with this statement and find it to be a true and correct account.

PROGRAM

Brain Mechanisms

BURTON S. ROSNER, Yale University, Chairman

- The influence of amygdalectomy on social behavior in monkeys. Allan F. Mirsky, H. Enger Rosvold, and Karl H. Pribram, Yale University.
- Discrimination along a size continuum following ablations of the inferior temporal convexity in monkeys. Mortimer Mishkin and Martha Hall, *Institute of Living*.
- Further analysis of visual choice behavior of monkeys with temporal lobe lesions. Karl H. Pribram and Mortimer Mishkin, *Institute of Living*.
- The role of the cerebral cortex in temperature discrimination. J. L. Downer and J. P. Zubek, The Johns Hopkins University and University of Manitoba.
- The effect of fluid deprivation on taste deficits following cortical lesions in rats. ROBERT M. BENJAMIN, Brown University.
- The failure to eat produced by lateral hypothalamic lesions. ELIOT STELLAR AND PHILIP TEITEL-BAUM, The Johns Hopkins University.
- Habituation of the arousal mechanism. Seth Sharpless, McGill University.
- Positive reinforcement from direct intracranial stimulation. James Olds and Peter M. Milner, McGill University.

Animal Learning I

- JOSEPH ANTONITIS, University of Maine, Chairman
- Reinforcement schedules in negative transfer.

 JOHN F. HALL, JOSEPH H. GROSSLIGHT, AND
 WINFIELD SCOTT, The Pennsylvania State University.

- Multiple deprivation in operant behavior. B. F. SKINNER AND C. B. FERSTER, Harvard University.
- Relative preference for fixed-interval and fixedratio schedules of reinforcement. C. B. Ferster AND B. F. SKINNER, *Harvard University*.
- The development of discrimination under intermittent schedules of reinforcement. W. H. Morse and R. J. Herrnstein, Harvard University.
- The effect of Sodium Pentobarbital upon responding under fixed-interval and fixed-ratio schedules of reinforcement. R. J. HERRNSTEIN AND W. H. MORSE, *Harvard University*.
- The effects of epinephrine hydrochloride on a rate of response, discrimination and fear (dog). Ogden R. Lindsley and Walter W. Jetter, Harvard University and Boston University School of Medicine.

Visual Perception I

CONRAD G. MUELLER, Columbia University, Chairman

- Investigation of the effectiveness of two standard color vision tests. George L. Denittis, Fordham University.
- Some comparisons among spectral sensitivity data obtained in different retinal locations and with two sizes of foveal stimulus. HARRY G. Sperling and Yun Hsia, Columbia University.
- Relative size as information in the "representation" of three dimensions. Edward H. Mcalister and Julian E. Hochberg, Cornell University.
- The effects of the angular relationships between the observer and the stimulus-surround on relative distance discrimination. RALPH DUSEK, WAR-

- REN H. TEICHNER, AND JOHN L. KOBRICK, Natick Quartermaster Research and Development Command.
- The effects of environmental factors on relative distance discrimination. Warren H. Teichner, John L. Kobrick, and R. F. Wehrkamp, Natick Quartermaster Research and Development Command.
- Size as a function of distance in the visual field and in the visual world. Alberta S. Gilinsky, Columbia University.
- The effect of prior training with a "scale" of distance on the relative judgment of distance. Eleanor J. Gibson and Jean Graham, Cornell University.

General Experimental I

- HAROLD W. HAKE, The Johns Hopkins University, Chairman
- Serial dependencies in a repetitive motor task.

 Bernard Weiss, Paul Coleman, and Russel Green, *University of Rochester*.
- The discrimination of relative frequency; the judgment of the apparent mean and median of a stimulus array. H. H. Corbin, James L. Morey, and Barbara V. Parshley, Mount Holyoke College, University of Utah, and Hanover, New Hampshire.
- The learning of visual pairs as a function of formal relationships. W. C. H. Prentice, Swarthmore College.
- Signal predictability and the likelihood of an error in Morse code receiving. Francis Mechner and Donald A. Cook, *Columbia University*.
- The effect of stimulus redundancy and response uncertainty on discrimination learning. Peter D. BRICKER, The Johns Hopkins University.
- Percepiual thresholds as a function of stimulus uncertainty. RAY HYMAN AND RICHARD L. SOLO-MON, *Harvard University*.
- Immediate memory, list learning, and amount of information. Sidney L. Smith, Massachusetts Institute of Technology.

Perception and Personality

- WILLIAM H. ITTELSON, Princeton University, Chairman
- Types of perceivers: intra-individual variability on three dimensions of perception. Howard Brand AND Paul J. Woods, *The University of Connecti*cut.

- Relationship of self concept to security, anxiety, and rigidity. Frederick S. Hauser, *University of Rochester*.
- Rigidity and reactive inhibition. ROBERT B. MALMO, Allan Memorial Institute of Psychiatry and McGill University.
- Personality correlates of manifest anxiety. E. L. Cowen, S. Alexander, F. Heilizer, and H. S. Axelrod, *University of Rochester*.
- The role of mediating verbal responses in the conceptual sorting behavior of normals and schizophrenics. James D. Fenn and Albert E. Goss, Northampton State Hospital and University of Massachusetts.
- Self-ratings of fear as a research instrument in fear-invoking situations. RICHARD D. WALK, Human Resources Research Office and Cornell University.
- A study of musical interpretation and personality.

 Julius Segal, The Johns Hopkins University.
- Some personality differences in the perception of emotional stimuli. Morton Silverman and Robert A. Harris, *Brooklyn College*.

Evaluation and Measurement

- ROBERT L. THORNDIKE, Columbia University, Chairman
- The discriminant value of MMPI items in personality disorders. Reuben S. Horlick, Walter Reed Army Hospital.
- Test of a method for predicting factual learning from a training film. John V. Zuckerman, Human Resources Research Office and The George Washington University.
- A technique for the selection of items to increase differential prediction in a test battery. Dorothy E. Green, Human Factors Operations Research Laboratories.
- A class of means. NATHAN JASPEN, National League for Nursing.
- A more efficient reliability coefficient. MAX MAR-TIN KOSTICK, State Teachers College at Boston.
- A comparison of four formulas for split-half reliability coefficients. Marion F. Shaycoft, American Institute for Research, University of Pittsburgh.
- The effect of motivational set on obtained intercorrelations and reliability coefficients. John C. Flanagan, American Institute for Research, University of Pittsburgh.

SYMPOSIA

- The Criterion Dilemma in Human Engineering. F. K. Berrien, Chairman; Clifford P. Seitz, Kenneth Yarnold, J. W. Gebhard, and Arthur Siegel.
- Problems and Difficulties in Evaluating Patient Progress in Therapy. Samuel Flowerman, Chairman; Clifford Sager, Bernard F. Riess, Sibylle Escalona, and Joseph Margolin.
- Personality Evaluation for Industrial Purposes. Daniel Brower, Chairman; Thomas N. Jenkins, Edward J. Keys, Raymond A. Katzell, and C. D. Genovese.
- Psychodynamic Patterns in the Pedophiliac Sex Offender. Bernard C. Glueck, Jr., M.D., Chairman; Sydney Connell, Emanuel F. Hammer, Irving Jacks, Isa Brandon, Zygmunt A. Piotrowski, Paul K. Benedict, Albert Ellis, and Robert Lindner.
- Problems in the Use of Projective Techniques in Research. Jules D. Holzberg, Chairman; Leslie Phillips, Leonard D. Eron, Michael B. Dunn, John E. Bell, and David C. McClelland.

SPECIAL MEETINGS

- Psi Chi. Max Meenes, Chairman.
- Public Opinion and Foreign Policy Decisions: Informal Discussion of Research Problems. Herbert C. Kelman and John Withall, Cochairmen.
- The Psychologist in Private Practice and the Public. Albert Ellis, Chairman; Molly Harrower, George Lawton, and Emanuel K. Schwartz.

Motivation

NEAL E. MILLER, Yale University, Chairman

- Some relationships between emotionality and hoarding. Elizabeth K. Powell and Wendell Smith, Bucknell University.
- Is exploratory behavior motivated by fear? K. C. Montgomery and John A. Monkman, Yale University.
- A comparison of the amounts of switching behavior produced by shifting drive from thirst to hunger and from hunger to thirst in a T maze. Alan

- D. KARASIK AND HOWARD H. KENDLER, New York University.
- Hunger-thirst drive discrimination in cats. Clark J. Bailey and Lyman W. Porter, Yale University.
- The role of discriminative stimuli in secondary reinforcement. Marvin L. Kaplan, *University of Buffalo*.
- Failure to find learned drive based on hunger, but evidence for the reward function of exploration. ARLO K. Myers, Yale University.
- The effectiveness of saccharin in reducing the appetite for two foods. WARREN W. ROBERTS AND JOHN L. LUKENS, Yale University.
- Differential reward value of three patterns of sexual behavior in the male rat. Jerry Kagan, Yale University.

Visual Perception II

- W. C. H. Prentice, Swarthmore College, Chairman
- The effect of brightness, monocular and binocular vision on sensitivity to apparent movement in depth. WILLIAM M. SMITH, Princeton University.
- The effect of brightness gradients on the position of the apparent median plane. Duilio Giannitrapani, Clark University.
- Perception as a function of retinal locus. Woodburn Heron, McGill University.
- "Satiation" and the Lauenstein-Jacobs effect. Eugene H. Galanter, University of Pennsylvania.
- Effect of directional dynamics of visually perceived words on the perception of the apparent horizon. STANLEY E. KADEN, Clark University.
- Recognition and the localization of visual traces.

 Hans Wallach and Pauline Austin, Swarthmore College and University of California, Berkeley.
- Three-dimensional autokinetic movement of large, bright stimuli. WARD EDWARDS, The Johns Hopkins University.
- The relation of autokinetic movement to reversals of Lissajous figures. ROBERT F. BARRON, Ford-ham University.

General Experimental II

- JAMES E. DEESE, The Johns Hopkins University, Chairman
- Sensory contributions to maze learning: a comparison of matched blind, deaf, and normals.

- JACOB BERG AND PHILIP WORCHELL, University of Maine and University of Texas.
- Bilateral transfer as a function of practice. Results of a new methodology. Robert Plutchik and Eileen Lieberman, *Hofstra College*.
- Organization and learning: stimulus items arranged in a square matrix. Scarvia B. Anderson and Sherman Ross, Naval Research Laboratory and University of Maryland.
- Stress effects on flexibility of performance of a coding task. L. T. KATCHMAR, T. G. ANDREWS, AND SHERMAN ROSS, *University of Maryland*.
- The influence of a "speed set" on "learning without awareness" experiments. Robert L. Weiss, *University of Buffalo*.
- The effects of the interaction and generalization of sets with respect to a related personality variable. Mark S. Mayzner, Jr. and M. E. Tresselt, New York University.
- Perceptual thresholds of affective versus neutral words. Lois C. Lawrence and Joe Adams, Cornell University and Bryn Mawr College.

Projective Techniques

- FLORENCE HALPERN, University Hospital, New York City, Chairman
- Motor and fantasy correlates of Rorschach human movement responses. Jerome L. Singer and Jack Herman, Franklin D. Roosevelt VA Hospital and New York University.
- Variance in the stimulus value of the Rorschach ink blots. Herbert Eichler and Milton S. Gurvitz, *Hillside Hospital*.
- Selected Rorschach ratios as a function of age and intelligence. Leonard D. Feinberg and Milton S. Gurvitz, Hillside Hospital and Adelphi College.
- Relationship between diagnostic category and deviant verbalizations on the Rorschach. William T. Powers and Roy M. Hamlin, Western Psychiatric Institute, University of Pittsburgh.
- The Rorschach in relation to age and mental level: a comparison of responses of mental defectives and normals. Serena Weissman, Thomas L. McCulloch, Joseph Reswick, and Irving Roy, Letchworth Village.
- Rorschach behavior as an index of color anesthesia.

 HERMANN O. SCHMIDT, CHARLES P. FONDA,
 AND JOHN R. LESTER, Norwich State Hospital.

- An H-T-P study of psychodynamic patterns in pedophiles. I. The age described to the drawn tree as an index of psychosexual maturity level. Emanuel F. Hammer, New York Psychiatric Institute.
- A developmental analysis of behavior in the mosaic test. Shephard Goldberg, *University of Buffalo*.

Industrial and Military

- A. G. WESMAN, Psychological Corporation, Chairman
- The relation of rhythm perception to rhythm performance. OLIN W. SMITH, Cornell University.
- The rigidity-authoritarianism complex and its relation to performance in military officer training schools. T. R. VALLANCE, American Institute for Research.
- A factor analysis of some concepts of leadership.

 DAVID R. SAUNDERS, Educational Testing Service.
- The development of an officer situations test. Barbara J. Suttell, American Institute for Research.
- The use of biographical information in the selection of driver-salesmen in baking industries.

 JOHN M. PROCTOR AND ARTHUR W. AYERS, University of Maryland.
- Dimensions of user acceptance: an approach to criterion research. Howard W. Hembree and Ray C. Hackman, Quartermaster Research and Development Center and University of Maryland.
- Factor analyses of performance on Navy junior officers. Albert S. Glickman, Officer Personnel Research Program, American Institute for Research.
- Biographical data of industrial executives concerned with employee relations policies. ARTHUR W. AYERS, *University of Maryland*.

Social Psychology

- ARTHUR SIEGEL, Research Associates, Philadelphia, Chairman
- The effect of certain family esteem relationships upon identification, superego development, and aggression of a group of four-year-old children. George W. Goethals, Sarah Lawrence College.

- Value similarity, propinquity, and sociometric choice. Joseph A. Precker, Columbia University.
- The former Soviet citizen's attitudes toward family as studied by a projective technique. Eugenia Hanfmann and Jack Getzels, Russian Research Center, Harvard University.
- Responses of former Soviet citizens to the "projective questions" test. Helen Beier, Russian Research Center, Harvard University.
- The humanitarian values of socioeconomic groups. Jerome M. Seidman, *University of Maine*.
- Some relationships between the modal behavior of tribal members and of tribal deities. Leigh Minturn and William Lambert, Cornell University.
- Some determinants of vote on fluoridation. Bernard Mausner, Alvan Leavitt, and Sidney Robbins, *University of Massachusetts*.
- A comparative personality study of adolescent heroin addicts and nonaddicts. Conan Kornetsky and Donald L. Gerard, National Institute of Mental Health and New York State Mental Hygiene Commission.

PRESIDENTIAL ADDRESS AND ANNUAL BUSINESS MEETING

NEAL E. MILLER, Chairman

Presidential Address: Fatigue, Effort, and Work Output. HAROLD SCHLOSBERG.

Animal Learning II

RICHARD L. SOLOMON, Harvard University, Chairman

- Frustration effect with two running habits. Stan-LEY S. PLISKOFF, New York University.
- A laboratory model for the study of displacement.

 Donald A. Cook and James A. Dinsmoor,

 Barnard College and Indiana University.
- Extinction of a conditioned "fear" response as a function of reinforcement schedules for competing behavior. Joseph V. Brady, Army Medical Service Graduate School.
- Effects of severe and prolonged daily punishment on the activity and growth of C-Scott albino mice. Joseph J. Antonitis, *University of Maine*.

- The effects of early experience on the response to noxious stimulation. Ronald Melzack, McGill University.
- The effect of early perceptual learning on the behavioral organization of adult rats. Ronald H. Forgus, *University of Pennsylvania*.
- Resistance to temptation as a function of antecedent dependency relationships in puppies. A. H. Black, R. L. Solomon, and J. W. M. Whiting, *Harvard University*.

Sensory Processes I

FREDERICK C. FRICK, Bolling Air Force Base, Chairman

- The difference limen as a function of retinal eccentricity at varying background brightnesses. Patricia McBride, Tufts College.
- Effect of tone on visual brightness. Thomas B. Mulholland, Clark University.
- The unison tuning of musical instruments. John F. Corso, The Pennsylvania State University.
- Comparative analysis of normal speech and speech with delayed side-tone by means of sound spectrograms. Anita I. Rawnsley, U. S. Naval Medical Research Laboratory.
- A study of speech perception ability and brain wave activity levels. John J. O'Hare, U. S. Naval Medical Research Laboratory.
- Pitch scale relations for the individual observer. ELLIS B. HARTMAN, U. S. Naval Medical Research Laboratory.
- The serial effect as a function of interstimulus interval. WILLARD F. DAY, The Johns Hopkins University.

Human Physiological

Hans-Lukas Teuber, New York University College of Medicine, Chairman

- Sensory and psychomotor acclimatization to the cold. John L. Kobrick and Warren H. Teichner, Natick Quartermaster Research and Development Command.
- Changes in blood composition as a result of a common-place stress situation. RUDOLPH L. ZLODY, Fordham University.
- Electromyographic and skin resistance studies of clinical tension. Jacob Davidowitz, Albert N. Browne-Mayers, Richard Kohl, and Livingston Welch, Payne Whitney Psychiatric Clinic.

- The effects of aspiration and achievement on muscular tensions. SAUL S. LESHNER, *University of Pennsylvania*.
- The relation of muscle action potentials produced in various ways to breakdown in ergographic work in ego-oriented subjects. Sherwin J. Klein, Aeronautical Medical Equipment Laboratory, Philadelphia Naval Base.
- The relationship between occipital alpha activity and laterality. A. Douglas Glanville and Joseph J. Antonitis, *University of Maine*.
- Visual and tactile discriminative learning in patients with space-occupying lesions of the cerebrum. W. S. Battersby, M. B. Bender, and H. P. Krieger, Mt. Sinai Hospital.
- Comparative effects of the bimedial, unilateral, and bilateral lobotomy operations on intellectual and emotional functioning. ARNOLD MEADOW, DANIEL LEVINSON, AND CHARLES ATWELL, University of Buffalo, Harvard University, and the Boston Psychopathic Hospital.

Clinical and Social I

JOSEPH M. MASLING, Syracuse University, Chairman

- A psychotherapy case showing progress but no drop in tension. Frank Auld, Jr., Alice M. White, and Edward J. Murray, Yale University and Walter Reed Army Hospital.
- How directive is nondirective psychotherapy? Edward J. Murray, Yale University and Walter Reed Army Hospital.
- An objective study of certain psychotherapeutic operations: a comparison of the verbal response behavior of Rogerian and non-Rogerian therapists. Hans H. Strupp, *The George Washington University*.
- A study of subjective certainty of diagnostic judgment of clinical psychologists. Joseph G. Phelan, Stevens Institute of Technology.
- Group therapy techniques with hospitalized chronic schizophrenic patients. Joseph M. Sacks and Stanley Berger, Franklin D. Roosevelt VA Hospital.
- A factor analysis of some personality items in a domain of social maturity. EDWARD NOLAN, ROBERT SADACCA, AND DAVID R. SAUNDERS, Educational Testing Service.
- The relationship between differentiation in interpersonal judgments and personal popularity.

- MURRAY LEVINE, VA Mental Hygiene Clinic, Philadelphia, University of Pennsylvania.
- The utility of projective test unreliability for the study of interpersonal relations. Lester M. Libo, University of Maryland Medical School.

Personality and Learning

E. Joseph Shoben, Columbia University, Chairman

- Some learning correlates of manifest anxiety. H. S. Axelrod, F. Heilizer, and E. L. Cowen, *University of Rochester*.
- The relationship between two measures of insight and two measures of distortion in ratings. Walter A. Fabian, Jr., *University of Buffalo*.
- The interiorization of conditioned attitudes. Gregory Razran, Queens College.
- Retroactive inhibition as a function of the attitudinal content of interpolated material. Norman Garmezy and Gregory A. Kimble, Duke University.
- Some personality correlates of stimulus generalization under stress. Charles W. Eriksen, *Harvard University*.
- Hostility and defense in serial learning. IRVING WOLF, Boston University.
- The effect of films on learning in a religious curriculum: an experiment. J. J. Stein, Yale University Divinity School.
- Learning and its relationship to two "kinds" of anxiety. Robert E. Silverman and Bernard Blitz, New York University.

Animal Learning III

WALTER C. STANLEY, Brown University, Chairman

- Mediated generalization of an avoidance response.

 Donald H. Bullock, William C. Smith, and
 Thomas Luparello, University of Buffalo.
- Relational perception in the solution of the intermediate-size problem by chimpanzees. M. E. BITTERMAN, *University of Texas*.
- Discrimination learning in the canary. NICHOLAS PASTORE, Queens College.
- Stimulus discrimination and timing behavior by white rats in an avoidance situation. Murray Sidman, Army Medical Service Graduate School.

- The effect of Benzedrine on time estimation in the rat. Peter M. Milner, McGill University.
- Transfer of place learning acquired in a free terrain to circumscribed maze paths. John D. Werntz, University of Pennsylvania.

Sensory Processes II

LORRIN RIGGS, Brown University, Chairman

- The effect of phase manipulations on electrocutaneous stimulation. Jack A. Vernon and Atden E. Wessman, *Princeton University*.
- The effects of subthreshold concentrations of monosodium glutamate on absolute taste thresholds. HAROLD VAN COTT, CHARLES E. HAMILTON, AND ALAN LITTELL, Alfred University.
- Visual acuity as a function of physiological nystagmus. Tom N. Cornsweet and Lorrin A. Riggs, *Brown University*.
- A technique for the measurement of simultaneous contrast in the pigeon. FLOYD RATCLIFF AND DONALD BLOUGH, Harvard University.
- The phase relation between stimulating sounds and cochlear potentials in the cat. E. G. Wever, M. Lawrence, and W. E. Rahm, Jr., *Princeton University*.
- The effect of electroconvulsive shocks on the auditory threshold of the rat. Robert S. Feldman and Claude C. Neet, *University of Massachusetts*.

Human Engineering

EDWIN B. NEWMAN, Harvard University, Chairman

- Sustained perceptual efficiency as measured by the Mackworth "clock" test. J. A. WHITTENBURG, T. G. Andrews, and Sherman Ross, *University of Maryland*.
- The visual discrimination of velocity as a function of the rate of movement. ROBERT H. BROWN, Naval Research Laboratory.
- Performance levels and transfer effects in compensatory tracking as a function of planes of rotation of control cranks. B. G. Andreas, R. F. Green, and S. D. S. Spragg, *University of Rochester*.
- Performance on a simple tracking task as a function of radius and loading of control cranks. A. A. Gerall, P. B. Sampson, and S. D. S. Spragg, University of Rochester.

- Rate accuracy in handwheel cranking. ROBERT S. LINCOLN, The Johns Hopkins University.
- The effect of signal rate on the performance of a visual monitoring task. Herbert M. Jenkins, Massachusetts Institute of Technology.
- The time required to search for numbers on large visual displays. BERT F. GREEN, WILLIAM J. McGILL, AND HERBERT M. JENKINS, Massachusetts Institute of Technology.
- A comparison of pursuit and compensatory tracking under conditions of aiding and no-aiding. Rube Chernikoff, Henry P. Birmingham, and Franklin V. Taylor, Naval Research Laboratory.

Clinical and Social II

SEYMOUR SARASON, Yale University, Chairman

- The effects of stress and co-workers' behavior upon the social-emotional behavior of an individual in a problem-solving situation. Don P. Haefner, University of Rochester.
- The reinforcement of co-operation between children. Nathan H. Azrin and Ogden R. Linds-Ley, Harvard University and Harvard Medical School.
- The relationship between group experimental level of aspiration measures and self-estimates of personality. Henry N. Ricciuti and Douglas G. Schultz, Educational Testing Service and Pennsylvania State University.
- Learning and retention of words of sexual and nonsexual meaning. Maurice G. Kott, Department of Institutions and Agencies, New Jersey.
- Strength of attitude as a determinant of perceptual selectivity. IRWIN ALTMAN AND ELLIOTT MCGINNIES, *University of Maryland*.
- Reports of problem solving as related to actual solutions by groups and by individuals. IRVING LORGE, JACOB TUCKMAN, LOUIS AIKMAN, JOSEPH SPIEGEL, AND GILDA MOSS, Teachers College, Columbia University.
- Recognition of value-relevant words as a function of set. Clark Leavitt, Ripon College.
- Effect of color-form incongruity on card sorting in neurotic and schizophrenic patients. Roy M. Hamlin and John T. Stone, Western Psychiatric Institute, University of Pittsburgh.

PROCEEDINGS OF THE TWENTY-FOURTH ANNUAL MEETING OF THE ROCKY MOUNTAIN BRANCH OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

LAWRENCE S. ROGERS, Secretary

Veterans Administration, Denver

THE Rocky Mountain Branch of the American Psychological Association held its twenty-fourth annual meeting with the Psychology Section of the Colorado-Wyoming Academy of Science on April 30 and May 1, 1954, at the University of Wyoming, Laramie, Wyoming. Twenty-two papers were read at three sessions, and two symposia were held. A luncheon and regional meeting of Psi Chi was held under the chairmanship of Dr. Anna Y. Martin of New Mexico Highlands University.

Hugh B. McFadden, President of the Branch, served as Chairman of the business meeting. It was voted to continue publication of the minutes of the meeting and the program as in previous years. Further attempts will be made to broaden participation of psychologists in neighboring states in Branch activities. The Branch unanimously recorded its gratitude to the University of Wyoming and to the Department of Psychology of the University for their hospitality.

The officers of the Branch elected for the year 1954-55 are: President, Lawrence S. Rogers, Veterans Administration, Denver; and Secretary, Wilson J. Walthall, Jr., University of Wyoming. Virginia M. Brown of the Lowry Air Force Base continues as treasurer.

PROGRAM

Friday Morning

KARL F. MUENZINGER, Chairman

The effects of drive level and experience on the reward value of a saccharine solution. P. J. CAPRETTA AND M. P. SMITH, *University of Colorado*.

The effects of prior consumption of sugar, saccharine, and water on milk consumption. M. P. SMITH, *University of Colorado*.

An inverse factor analysis of behavior in experimental group psychotherapy. W. L. SMITH, University of North Dakota, L. F. KRAUSE, University of Colorado and University of North Dakota, and D. D. GLAD, University of Colorado

An inverse factor analysis of relationships between behavior and fantasy in experimental group psychotherapy. L. F. Krause, *University of Colo*rado and *University of North Dakota*, D. D. Glad, *University of Colorado*, and W. L. Smith, University of North Dakota and North Dakota State Hospital.

Behavior of chronic schizophrenics in experimental group psychotherapy. R. Ferguson, Colorado State Hospital and University of Denver, M. HAYNE, Colorado State Hospital, and D. D. GLAD, University of Colorado.

The secondary reward value of cues associated with shock escape. G. N. Buchanan and M. P. Smith, *University of Colorado*.

The role of negative instances in concept formation.

C. D. FINK AND M. P. SMITH, University of Colorado.

Saturday Morning

Session I

JACK R. GIBB, Chairman

The effects of feedback distortion upon group processes. A. J. LOTT, J. H. SCHOPLER AND J. R. GIBB, *University of Colorado*.

- The effects of congruity of expectations upon group processes. J. H. Schopler, A. J. Lott, and J. R. Gibb, *University of Colorado*.
- Patterns of changes in certain aspects of the attitude of respect for the worth and dignity of others occurring in students taking a general education program during one academic year at a teacher education institution. A. H. Luker, Colorado State College of Education, and E. L. Ruman, Iowa State Teachers College, Cedar Falls, Iowa.
- The relationship between certain variables measured by sociometric devices and certain aspects of the attitude of respect for the worth and dignity of others. A. H. LUKER, Colorado State College of Education, AND L. G. SWENSON, Adams State College, Alamosa, Colorado.
- The influence of a seventh-grade remedial reading program on pupils' reading and other academic achievement in high school. WILMA E. HIRST, McCormick Junior High School, Cheyenne, Wyoming, AND A. H. LUKER, Colorado State College of Education.
- Establishment of norms for University of Wyoming students and the devising of standardization of a reading test. Jeane K. Taylor and Lillian G. Portenier, *University of Wyoming*.
- The relationship between selected variables and first-quarter grade averages in the College of Commerce and Industry at the University of Wyoming. QUENTIN C. STODOLA AND O. R. HENDRIX, University of Wyoming.
- Biological intelligence and consistency of perceptual time variables. A. J. Orange, Fitzsimons Army Hospital, Denver.

Form fields in children as related to age and sex.

KATE R. McGraw and Hugh B. McFadden,

University of Wyoming.

Session II

DONALD D. GLAD, Chairman

- A pilot study: The use of the full-range picture vocabulary test as a screen for intellectual level.

 L. Kidorf and Anna Martin, New Mexico Highlands University.
- A validity study of white-space responses in Rorschach protocols. L. Ryan and Anna Martin, New Mexico Highlands University.
- Rorschach responses of physically handicapped girls and boys. Patricia Lucore and Lillian G. Portenier, *University of Wyoming*.
- The use of dramatic play for diagnosis and therapy. E. E. Graham and Lillian E. Whitmore, *University of Denver*.
- Intellect after cerebrovascular accident. R. BAUER, VA Hospital, Sheridan, Wyoming.
- An observational study of a VA psychiatric ward. W. K. GARLINGTON, VA Hospital, Sheridan, Wyoming.

SYMPOSIA

- Training and Function of School Psychologists. Victor C. Raimy, Chairman, Owen Caskey, F. Allan Murphy and Philip Buck.
- Poor Performance as a Function of Inadequate Learning. Robert H. Bruce, Chairman, Ken-NETH B. ASHCRAFT, LAWRENCE E. DAMERON, E. ELLIS GRAHAM, RICHARD JESSOR, AND ARNO H. LUKER.

Guidebooks to Psychological Literature

The article "Guides to Psychological Literature" by A. J. Latham 1 and the Comment by Joshua A. Fishman 2 prompt us to bring to the attention of your readers two new "guidebooks" to psychological literature, one published last year and one to appear in the near future. These may be overlooked because they form parts of books dealing with more general matters.

Professional Problems in Psychology, by Robert S. Daniel and C. M. Louttit,3 embodies a revised and enlarged edition of Louttit's Handbook of Psychological Literature,4 one of the numerous contributions Dr. Louttit made to the bibliography of psychology even before 1947, when he became editor of Psychological Abstracts. Chapter 3, "A Survey of Psychological Literature" (pp. 35-66), takes "the reader on an inspection tour of the many widely scattered sources of library materials for which the psychologist may find a need." This includes guides to serials, government and institutional publications, and reference books as well as the matter of locating information about and evaluating books. Chapter 4, "Bibliographic Problems in Psychology" (pp. 67-98), "provides identification and evaluation of the most useful [bibliographic] digging tools and instruction toward a fuller mastery of their use." The titles discussed in these two chapters are then listed, together with others also found valuable, in Appendix A, an "Annotated List of Reference Books of Value in Psychology." The 306 entries are classified, leading from the general to the specific (General; General Science; General Biological and Medical Sciences; General Psychology; and seven psychological specialties which correspond to the major classes of Psychological Abstracts). Where they exist, Bibliographies, Bibliographic Indexes, Literature Guides, Periodical Indexes, Abstract Journals, Directories, Dictionaries, and Encyclopedias and Handbooks are so grouped. Another Appendix, a "Bibliography of Journals in Psychology," suggests less explicitly, but perhaps more dramatically, that guidance is indeed needed to a literature which has spread from the 331 specifically psychological periodicals there listed to innumerable other publications.

A Handbook of Medical Library Practice, by the Medical Library Association,⁵ includes a frequently an-

notated bibliography of bibliographies and other reference works for medicine and the allied sciences. In its arrangement it parallels the "Annotated List" given by Daniel and Louttit, starting with general science, then taking up general medicine, and finally the specialties. The coverage of psychology, as one of the special fields, is of course much narrower than in Daniel and Louttit. The chief value for psychologists lies rather in the listing of bibliographic sources in the allied fields, sources less apt to come to the attention of the psychologist. The topics which may be of particular interest are: Altitude, Anthropology, Chemistry, Endocrinology, Genetics, Geriatrics, Industrial Medicine, Narcotics, Ophthalmology, Pediatrics, Physiology, Psychiatry and Neurology, Psychology, Rehabilitation, Social Welfare, Statistics, Technique, and Ultra-

Psychologists may ask whether some kind of a selection would not suit their purposes better than these comprehensive surveys. In that case Dr. Latham's list of 48 items, even though superseded with regard to numerous details, might be thought to offer the more condensed and therefore more practical information. Dr. Latham's article was submitted before the publication of the book by Daniel and Louttit. Thus, for the first time in the more than twenty years that had elapsed since Louttit's Handbook appeared, psychologists were reminded of the fact that references relating to psychology can also be found in medical, scientific, or general bibliographies. If only inadvertently, the article, with its sparsity of compilers' names, testifies to the decline of the participation of subject specialists in bibliographic work.6 But psychology, as a latecomer among the sciences, has not yet suffered this decline. From the beginnings to our day, psychologists have gathered and presented their literature and have resisted the more mechanized and thus increasingly nonselective compilations long since accepted for older subject fields.7

We agree that many of the not specifically psychological sources, when their appropriate use is fully understood, may add something not equally well achieved by the foremost subject bibliography, *Psychological Abstracts*. Some may cover more, others may be more up-to-date or penetrate more deeply into borderline areas. If used at random, however, they will only

¹ Amer. Psychologist, 1954, 9, 21-28. ² "Additions to 'Guides to psychological literature.'" *Ibid.*, p. 159.

3 New York: Prentice-Hall, 1953.

Bloomington, Ind.: Principia Press, 1932.

⁵ Second edition, revised and enlarged. Chicago: American Library Association, in preparation.

⁶ Cf. Brodman, Estelle. The development of medical bibliography. Baltimore: Medical Library Association, 1954.

⁷ Cf. BAYNE, HELEN, & BRY, ILSE. Problems and projects in the bibliography of psychiatry and psychology. *Libri*, in press.

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lead psychologists on a time-consuming search for references better presented and indexed in their own Abstracts. Diminishing returns can certainly be expected in all those instances where the Abstracts have already combed the same sources for psychologically relevant material. Within the inner sanctum of psychological bibliographies, pertinence is vouchsafed for psychologists by a colleague serving as author, compiler, abstracter, or editor. As psychologists venture outside to references at large, they will need the most careful and enlightening orientation. Before turning to nonspecific guides, they should be able to see the possible choices in their proper perspective.

For guidance to psychological literature beyond that expertly offered within the psychological literature, we therefore recommend the study of the two works cited. These show, as well as can be done without special training in the use of library material, why a given bibliography, an abstracting service, an index, and so forth, might have the answer to a bibliographic problem at hand.

ILSE BRY
Neuropsychiatric Library
New York University—Bellevue Medical
Center

Janet Doe Librarian, New York Academy of Medicine; Acting Chairman, Psychoanalytic Collections Conference of New York City

MARGARET M. KINNEY
Chief Librarian, VA Hospital, Bronx, N. Y.;
Chairman, Subcommittee on Book Appraisal,
American Library Association Adult Education Board

Psychology and Legislation

By error my name was printed among the signatories to the report on the "Implications for Legislation in the Report of the Ad Hoc Committee on Relations between Psychology and Other Professions" in the October issue of the American Psychologist. As a recently appointed member of the ad hoc Committee, I had not been able to affirm one implication in the statement, and I had sent the chairman two unfinished letters exhibiting my soul-searching to prove it. The error was not the chairman's but arose in the process of the report's coming into print as adopted by the Council of Representatives.

Now that we in New York State have time to breathe again, I would like to make my position clear. Although most of the report, I feel, is very good and much of it is excellent and I am proud to be associated with it, I am unable to go along with the general

recommendation in favor of certification in contrast to licensing.

Of course we do not wish to limit the functions of the psychologist to the profession of psychology alone, and therefore it would seem theoretically that certification, which limits only the use of a name, is better than licensing. But in reality certification and licensing have very different meanings for the public at large. The latter term has much more the connotation of a professional group which takes responsibility for itself and its service to society. These public connotations have considerable importance, and their full reality must be taken into account in legislation unless we are prepared to undertake the long-term task of altering in the public mind the usual connotation of terms.

I believe—and the Joint Council in New York State takes this position—that a hybrid licensing-certification bill, which deals only with those who call themselves psychologists and perform certain functions, is better. The Tennessee licensing bill, and the licensing bill passed by the Legislature but vetoed by the Governor in New York State in 1951, are, in my judgment, the recommended type.

May I also share some ideas that have impressed themselves strongly upon many of us in the center of these legislative conflicts in New York State, and that, therefore, may be of value to others. We need to remind ourselves that the solutions to these legislative problems can only be hammered out on the anvils of the social and political realities in each state at a given time. Most of us intellectuals face the danger of overlooking some of the immediate, dynamic aspects of the problems which must be struggled with day in and day out in the political arena and in the market place of public opinion. Politically and socially, truth is always partially hewn out in action. The function of thought and discussion in this field is not chiefly to come to conclusions but to help us to clarify our principles and to see the social and political realities we are dealing with as clearly as possible. A corollary error of liberal intellectuals is the assumption that principles carry their own power. Actually, the adage, "The pen is mightier than the sword," is particularly true in the expansive, liberal periods of history, but it is relatively less true in reactionary, constrictive periods like our own. Truth can be buried for decades or centuries unless it is allied with democratic power. In a democratic society like ours going through a constrictive period, it is the responsibility of citizens to back up their truth with every effort to enlighten public opinion and with every other form of democratic political

This implies that the function of national committees, and our generally excellent statements arrived at by the energetic and consecrated thought of the members of the national committees, is to guide, inform, support, and stimulate psychologists in each state in their endeavors to work out creatively the best solution for their particular situation. Our general recommendations should be an aid to—and never a substitute for—the realistic grappling with these issues on the part of psychologists in each state.

It may also be of value to try to see our present political conflicts in historical perspective. Obviously what is going on is much more profound than the matter of particular bills in legislatures, whether these bills are for or against psychologists. And obviously values are at stake that are infinitely more important than any people's jobs or even the survival of this or that profession.

What is happening, to my mind, is the emergence of a new view of man, namely the understanding of and dealing with man as a psychological and social being rather than chiefly a biological being. We have talked in theory for several decades about this new approach to man, but now this view bids fair to come into being as an actuality. One has only to read history to demonstrate this thesis confidently. The central emphasis in our culture since the Renaissance has been upon the understanding and control of physical nature and those sides of man which are amenable to the methods that worked with such amazing success in dealing with physical nature. This view of man as the predominant view is now threatened. Whenever a new approach to man emerges, as in the Greek period or the Renaissance or any other historical period, there is always a greater or lesser social upheaval and radical shifting in modes of thoughts and alignment of professions. To the extent that the new force and ways of thought emerge successfully, the forces and groups identified with the older views tend to become for a time more dogmatic and more constrictive.

Obviously whether man's social and psychological understanding and control of himself will progress sufficiently before our civilization destroys itself is not at all certain. But we can only fervently hope and dedicate ourselves energetically to working for the realization of that hope. It is not arrogant to say that the science and profession of psychology has its significant role to play in this crucially important social change.

Some implications follow from such a perspective. Clearly we should ally ourselves with all groups who share such values—farseeing physicians and psychiatrists, the clergy, social work and social science groups, and other liberal social welfare bodies—to unflinchingly oppose restrictive legislation. But beyond standing firmly against socially harmful restrictions, it is vital to continue to remind ourselves that there are many things infinitely more important in this develop-

ment than what happens in legislatures. My own feeling is that we need to be in no hurry to get legislation for psychologists-except in particular states where immediate situations make it advisable. In general, legislation is a by-product of the development of a profession rather than a "cause." The public is to be protected from quackery, first by our training enough competent helpers with high standards, secondly by public education, and only thirdly by legislation. We cannot depend on legislation to serve as a substitute for our own continuous efforts at inner discipline. In fact, inner discipline in a profession is always better than that imposed from the outside. Inner discipline is more creative, flexible, and susceptible to growth, and it avoids the danger of the profession's being statically pegged at the level existing at the time of licensing.

The above perspective also implies anew that we must put great—possibly first—emphasis on development of adequate facilities for training. And finally I think the above perspective gives us the basis for confidence; for despite the difficult ups and downs of our past conflicts and those we will face in the future, one cannot see how, if the world survives, the broad values and use of the science of man can fail to come into their rightful place.

ROLLO MAY
President, New York State
Psychological Association

Faculty Attitudes Toward Congressional Investigations

In January 1954 the Community Center in Bangor invited me to participate in a panel discussion on the current Congressional investigation of college campuses. Almost concurrently, the *Journal of Social Issues* published an issue dealing with the same topic, and concluded that "virtually nothing is known of the actual effect on teaching and research" of such investigations, and suggested that seriously needed research to assess these effects ought to begin right on the college campus.

Accordingly, I composed a short questionnaire and distributed it to all 90 members of the College of Arts and Sciences of the University of Maine. I limited myself to this college of the Maine campus because I felt that its faculty was more directly involved in these issues since they come up for discussion in the classroom as part of the course work.

The questionnaire was a "free response" type and the instructions read as follows:

Dear Colleague:

I am planning a research paper on the psychological effects of Congressional investigating committees on the college community. In the interest of obtaining some factual,

objective information, your cooperation in answering these questions would be appreciated.

Unless you want to, it is probably desirable that you do not sign your name since anonymity is the surest way to maximize honesty, confidence, and freedom of expression.

Sixty-three per cent of the faculty returned the questionnaire completed, but only 12 per cent signed their names. Although the questionnaire was a "free response" type, it was not difficult to analyze the answers given to each of the questions and categorize them in the manner shown below. What cannot, unfortunately, be shown in this statistical analysis is the emotion, ardor, and depth of feeling that went with these attitudes.

Here are the questions and the analysis of the answers. They are based on the 57 returned forms:

1. Do you believe that the issue of whether there are Communists on the faculties of American universities is sufficient to warrant Congressional investigation?

Yes-16% No-76% Not sure-8%

2. In principle, do you believe that Congressional investigating committees should investigate the political views and affiliations of faculty members?

Yes-12% No-80% Not sure-8%

3. If a teacher refuses to testify before a Congressional investigating committee, or refuses to testify on the grounds of self-incrimination, what action, if any, should be taken against him?

A college committee should investigate	33%
Nothing should be done	30%
He should be dismissed	10%
He should be cited for contempt	6%
Suspended until all the facts obtained	4%
F.B.I. should be called to investigate	
Don't know what should be done	13%

4. Do you feel that Congressional investigations of colleges have a beneficial effect? Would you explain your answer?

Yes—6% No—75% Alerts public to this evil— 12% Yes, if their methods were changed—4%

5. Has the recent publicity concerning these investigating committees influenced the open discussion of controversial issues in your classes?

Yes—16% No—66% Such issues don't arise— 18%

6. Do you tend to avoid discussing controversial issues with your colleagues?

Yes-7% No-93%

7. Have your readings been influenced in any way? For example, have you found it "safer" or "advisable" to cancel subscriptions to certain journals or periodicals or magazines, or stopped reading them in libraries? Or have you been encouraged to read controversial publications?

Cancelled subscriptions	12%
No change in reading habits	82%
Encouraged to read controversial material	6%

Since 63 per cent of the faculty of the College of Arts and Science returned the questionnaire—a fairly high return as questionnaires go—what may be said about the 37 per cent who did not? Since there is no way to determine who did or did not return the questionnaire, it seems fruitless to speculate about them. Are they the ones who typically ignore questionnaires, or were they afraid to commit themselves on paper with or without a signature? It is difficult to try to answer such questions.

It is the hope that others will be encouraged to attempt an evaluation of the opinions and attitudes pervasive on their campuses. It would be a real contribution if enough data were collected all over the nation so that college faculties may be given an opportunity to inform themselves as well as the public on how they stand on such issues.

JACOB BERG
University of Maine

APA Journals: Suggestions for a Radical Change

The comments in recent issues on APA publication difficulties (*Amer. Psychologist*, 9, 37-40) have stirred me to present for consideration the following rather radical suggestions.

Perhaps all articles of APA journals might be issued as separates, even though the existing journal names (and editors' domains) would remain unchanged. The size of the smallest article published would be tagged as "one unit." Larger articles would "cost" correspondingly more units each. Subscribing members would pay a fixed sum at the beginning of the year, entitling them to a certain number of such units, redeemable by coupons.

Each editor would be assigned so many units, just as now he is assigned pages. Fixed subscription prices might be set at bargain rates for the entire output of APA, or for the output of any one editor. Existing editorial and selection policies will not be changed, except that prior publication will be discontinued, presumably because no advantage will accrue.

To be accepted by an editor, an article must be accompanied by an abstract substantially ready for inclusion in the *Psychological Abstracts*. The *Abstracts*, then, would become a prepublication catalog. Each APA publication listed would be identified by an order number, and each issue would contain a preprinted order blank. All subscribers (except those buying the entire output) would then order only those articles chosen to be of interest on the basis of the printed abstract. This is substantially the procedure used by the United States Superintendent of Documents in retailing huge quantities of a wide variety of titles.

The demand for each article is estimated by sampling the requests received in the first few weeks following each issue of the Abstracts, and the appropriate quantity (allowing for storage for the future) is printed. Members would be entitled to one postage-free mailing for each bimonthly issue of Abstracts. Orders could be placed for any article any time, remitting in cash or subscription coupons.

Thus, one would have available an abstract of an article almost immediately upon acceptance by the editor, and the actual article would be in the interested reader's hands sooner than now possible. The abuse of the author's reprint privilege will end, since an author will (if he desires) reply to a request with the information that his article is available as Number so-and-so from APA at a nominal cost.

All articles would be reproduced in the same format, and home or library binders would accommodate varying numbers of them. A microcard edition might prove feasible, if demand can be predicted. To avoid wasting empty space at the end of an article, accurate guides to proper length would be provided to authors. Outsize charts and illustrations could appear occasionally. Improvements in details would come from suggestions from members before such a system would actually be put into effect.

To summarize: the "personality" of each APA journal will be maintained, but the physical appearance of the separately issued articles would be standardized. Prepaid subscribers would purchase only those articles chosen on the basis of regularly issued prepublication abstracts, and only enough copies of each article to meet its demand will be printed.

MITCHELL M. BERKUN

Human Resources Research Office

George Washington University

A Child Behavior Program on Television

As several psychologists have reported their experiences in presenting psychological material to the public by means of TV, it seemed that readers might be interested in a child behavior program directed to parents which I have been giving weekly in Boston for the past two years.

"Child Behavior" is a half-hour program, spontaneous and unrehearsed, sponsored as a public service by the Boston Globe and Station WBZ-TV. As a rule there are four guests—mothers, fathers, educators, social workers. These guests ask questions about any phase of the behavior of children from birth to 16 years, and the discussion, ranging over many topics, is based on child development research and a philosophy grounded in normal child growth.

Public acceptance, at least by parents and teachers, appears to be excellent. The public appears to appreciate the fact that suggestions and advice given over the air should in no case be considered "clinical ad-

vice" or absolute diagnosis. However, it is usually possible to help a parent distinguish between "normal" behavior which might be expected at a certain age or in a child of a certain personality type from behavior which in our opinion is severe enough to warrant consulting a specialist.

Furthermore, a program of this kind seems to operate somewhat like a graduate course—directed to parents rather than to students. In the course of the two years which the program has run, the kinds of questions asked have changed, the changes reflecting, in our opinion, an increased understanding of basic child behavior principles.

The program has at present, it is estimated, a weekly audience of several hundred thousand viewers. Co-operation of mothers' groups, Parent Teachers Associations, school administrators, and social agencies in the Boston area has been excellent from the beginning.

Louise Bates Ames Gesell Institute of Child Development

Comment on Eysenck's "Further Comment on 'Relations with Psychiatry'"

I fear that Dr. Eysenck's letter (Amer. Psychologist, 1954, 9, 157-158) will serve to muddle some serious issues. It is not to the point to discuss the efficacy or lack of efficacy of psychotherapy here. I would hope that Dr. Eysenck would agree that further and more sophisticated research is needed in this area. We will not, however, improve the quality of research or practice by shutting ourselves off from the field of investigation. The argument that one can do research on psychotherapy—or applied physics for that matter—without knowing anything about the subject, while self-flattering to our research abilities, is presumptuous. It is likely, as has been true in the past, that we should ask the wrong questions and use wrong methods to extract wrong answers.

A point that Dr. Eysenck and others often miss is that psychotherapy is a method for studying the human psyche. We have apparently accepted the fruits of this method, by including concepts derived from it in almost all introductory textbooks in psychology. But whether it is a good or bad method is not at issue. Should an association of mathematicians attempt to secure legislation against Dr. Eysenck's use of factor analysis, or a society of physicists against the use of electronic equipment, we would feel similarly called upon to resist, and questions of the beneficial effect to society of factor analysis and arguments as to who does better factor analyses would be unfortunate side issues.

Of course, the matter is not so simple. Psychotherapy, by its intimate dealing with human happiness or unhappiness, can have potential for leading to harm

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—though I may point out that this too has not been demonstrated statistically. But as long as there is the slightest risk, we must use whatever limited knowledge we have toward training in the direction of benefit rather than injury; and we have a responsibility toward society for discriminating between the untrained and the trained among us. It is, therefore, unfortunate for all when legitimate goals of better research, better service, and better training are lost sight of as a result of nonfunctional status concerns.

HAROLD L. RAUSH University of Michigan

Comments on "The Use of Human Subjects in Psychological Research"

While Irwin Berg's report on "The Use of Human Subjects in Psychological Research" (Amer. Psychologist, 1954, 9, 108–111) places a salutary emphasis upon the precautions experimental psychologists should take both to protect the subjects' welfare and to prevent the public's wrath, other precautions need to be borne in mind lest a fear of being classed with the Nazi "doctors of infamy" causes an unhealthy swing to the other extreme of inactivity in particular areas of research.

In many areas where research is desperately needed, few fruitful investigations could be conducted if the subjects were to have the advance knowledge the Nuremberg principles seem to demand. These medically oriented principles in general require considerable revision before they can be applied directly to the realm of psychology.

Another factor that must be recognized is that an experiment conducted solely with voluntary subjects may suffer thereby a delimitation often disregarded. A sample of voluntary subjects may not be truly representative of the universe under scrutiny. Volunteers may differ from nonvolunteers in ways germane to experimental assumptions, hypotheses, and conclusions.

From these considerations the following suggestions naturally flow:

- 1. The Nuremberg principles should be translated into psychological terms through an accumulation of illustrative incidents and a resultant formulation of additional principles to be included under Section 4.3 of Ethical Standards of Psychologists.
- 2. The relevant ethical principles already adopted should be adhered to by experimenters, who are therein given leave to withhold information or induce emotional stress when justified, but are cautioned to remove "possible harmful after-effects" at the first opportunity.
- 3. Experimenters who rely on the use of volunteers should consider the possible influence upon their find-

ings of the voluntary nature of the subjects and, where necessary, should qualify their conclusions accordingly.

DANIEL SINICK New York City

I am writing in reply to Irwin Berg's thoughtful article entitled "The Use of Human Subjects in Psychological Research," which appeared in the March 1954 issue of the American Psychologist. Dr. Berg recommends that psychologists, along with other scientists, take cognizance of Telford Taylor's humane principles, to make sure that totalitarian thinking does not creep into science under the guise of research.

Surely no American psychologist will question the importance of Taylor's principles as they relate to the general field of science. One cannot however abstain from pointing out that the assurance of "sufficient knowledge and comprehension of the elements of the subject matter involved" in an experiment may prevent much important work in psychology that is essentially harmless to the subjects concerned. I am referring especially to projective techniques and to certain designs involving emotional dynamics and ego-defense mechanisms. Revealing the "method and means" of an experiment in these areas will certainly inject some cognitive and affective variables which will vitiate the results obtained.

We can agree that the stability of a subject's emotional adjustment must not be threatened; that the explicit consent of the subject or his guardians is essential; that the experimenter owes the subject an explanation (ultimately) of the design of the experiment and the results obtained; that the subject ought to benefit, in some measure, emotionally or at least financially. But, with these reservations, any competent psychologist should be privileged to design his experiments in a way that is most useful to his problem. To adopt any other restraints is to retard the growth of knowledge in areas which—at this particular juncture—give promise of doing more to promote the welfare of human beings than anything invented by psychologists since the days of Binet and Simon.

MAURICE H. KROUT Chicago Psychological Institute

Comments on the "Social Science Reporter"

I notice in the Psychological Notes and News section of the April American Psychologist an announcement of a publication which presents abstracts of research significant for management, published by a Mr. Harlow. In view of the high value which Mr. Harlow apparently sets on his publication by charging \$250 a year for a four-page newsletter which appears twice a month, and in view of the fact that the social scien-

tists who do the research which provides his material receive no compensation for its use (except for a few reprints of his abstracts and the privilege of subscribing to this newsletter for only \$25 a year), it seems to me that psychologists should consider whether or not they wish to allow the use of their material for the profit of Mr. Harlow. I would very much like to see a committee of the APA investigate this enterprise, and report whether or not it deserves our cooperation.

ARTHUR GLADSTONE Swarthmore College

I am sorry Professor Gladstone was not in possession of the full facts about *The Social Science Reporter*. The facts are these: Launching "The Reporter" has been an expensive and difficult undertaking. The only source from which I could get enough subscriptions to hope to make the enterprise pay was large corporations. However, not quite enough did subscribe to cover the first year's cost, so I did not break even. I hope to recoup my loss and make a little profit during the second or third year. I wish subscriptions could be sold for a much lower price, but do not see how that will be possible for some time to come.

Scores of social scientists (psychologists included) have given me warm encouragement in publishing "The Reporter." They see in it a means of drawing business executives and social scientists closer together and thus opening new channels of usefulness, recognition, and financial return to themselves and other scientists. They have freely offered the use of their research findings and said "thank you" when these findings have been abstracted and published in "The Reporter." They do not seem concerned, as Professor Gladstone evidently does, that I might profit from this activity, which offers so much benefit to the entire field of social science.

As for psychologists considering "whether or not they wish to allow [me] the use of their material," as Professor Gladstone seems to think they should not, they are already deciding the matter individually. Every abstract of a study prepared for publication in "The Reporter" is submitted to the author of that study for approval before it is published. This unbroken policy has been in effect since early last year. At first, when a study by more than one scientist was abstracted, a copy of the abstract was sent for approval to what was considered to be the senior scientist of the group. This procedure was soon discontinued in favor of the pres-

ent one of mailing copies to and seeking approval from all scientists who have a part in a study.

I can see no basis in fact, fairness, or logic for the "investigation" which Professor Gladstone recommends. However, nothing about "The Reporter" needs to be concealed. I will gladly open the publication's records if doing so will serve any useful purpose.

REX F. HARLOW Editor and Publisher, The Social Science Reporter

A Comment on Dennis' "Productivity Among American Psychologists"

Doubtlessly, as Dennis states (Amer. Psychologist, 1954, 9, 191-194), ". . . scientists differ greatly in regard to the number of their publications. . . ." Thus psychologists are no different in this respect than chemists, biologists, or other groups in the scientific fraternity. In studying the publications data of four different groups of American psychologists, Dennis found "the total output of each of the groups is made up to a large extent of the publications of a relatively small number of productive individuals." This disparity could be (and probably would be) accentuated even more if additional sources of publications data were consulted other than those specifically relating to psychological publications only, as was the case in the studies cited by Dennis. Particularly within the past quarter century, and more especially since World War II, an increasing number of psychologists have been writing for and have published articles of a psychological nature which have appeared in nonpsychological and nonscientific journals, e.g., trade journals and popular magazines. Also, in this respect, many papers delivered before scientific (and nonscientific) meetings which oftentimes are not published, for one reason or another, would provide us with still another piece of datum which would perhaps serve to widen this disparity between the "highly productive minority" and the "less productive majority."

The point is: if more rigorous and exhaustive publication-searching evidence is and can be employed in comparing the productivity of scientists, including psychologists, we may find that this disparity may be more pronounced than we had been led to think from the studies made to date.

B. J. Speroff Industrial Relations Center, University of Chicago

Across the Secretary's Desk

Central Office Mail

By the end of December the APA Central Office will have received through the mail a 1954 total of approximately 97,000 letters, forms, manuscripts, cards, bills, checks, and packages. It will have sent out during the same period a total of about 150,000 letters, forms, cards, memorandums, checks, bills, manuscripts, booklets, reminders, and packages. In addition, the office will have facilitated the mailing of over 600,000 separate issues of psychological journals. During the year the office will have received about eight communications per APA member. It will have either executed or facilitated the mailing of about 62 items per APA member.

It is not far wrong to view the Central Office as a mechanism for receiving, opening, distributing, reading, digesting, processing, codifying, and filing mail—and for seeing that eight pieces of it are sent out for each single piece received, with each of the eight going at the proper time with the proper content to an appropriate recipient in a correctly specified part of the world.

Though any chronic seeker after system and efficiency would throw up his hands at psychologists' cantankerous resistance to routinization and uniformity, the over-all Central Office mechanism has worked out a number of routine submechanisms. There are forms and codes and routing and filing systems. And there are machines-addressographs, letter-slitters, typewriters, dictating machines, transcribing machines, and duplicators. But mostly there are people, people whose skills and habits and temperaments somehow get intricately involved and coordinated in the functioning of the whole system. They operate the machines and run the routines. They do many things that somebody ought to invent new machines to do. And they do an enormous variety of things-including some thinking-that seem, at the moment, a good deal beyond the potentialities of machines.

There follow some data dealing with the flow of mail in and out—mainly out—of the Central Office. They are set down here in the belief that any APA member who happens to be interested can find in them some picture of central mechanisms that cost him money, that give him some service, that, more often than anyone likes, frustrate him

—and that, if they went berserk, might victimize him. The data do not deal with the mailing of journals; they focus instead on the less automatic communications handled entirely in the Central Office. (Journals are mailed by their printers. The Central Office supplies the printers with address labels.)

During the first four months of 1954, Central Office people counted all incoming mail, kept records of all outgoing mail, and ran off "research carbons" of all letters individually composed. During that period the office received 32,409 pieces of mail and sent out 66,050. We did not take the time to analyze and tabulate the incoming mail on the grounds that such would have slowed up the functional disposition of it. Everybody wants action as of yesterday. We did take a fairly close look at outgoing mail—after it had gone out. We had taken a similar look at outgoing mail in the first four months of 1951, so that we now have the bases of a comparative look at some office functions in the two years.

Table 1 presents some comparative figures for 1951 and 1954 on APA and on Central Office functions. The data seem to say that in these three years the Association has grown both in size and complexity. We came by 3,700 new members and

TABLE 1
CHANGES IN APA AND IN CENTRAL
OFFICE MAIL, 1951-1954

Item	Number 1951	Number 1954	Percentage Increase
APA membership	8,600	12,300	43
Number of committees	24	44	83
Professional employees, Central Office	5	61	25
Total employees, Central Office	13½	241	80
Total incoming mail	27,091*	32,409*	20
Outgoing mail (including 2 special mailings to all members)	35,427*	66,050*	86
Outgoing mail (exclusive of 2 special mailings to all members)	35,427*	42,050*	24
Total individually composed letters	2,387*	3,560*	49

^{*} Figures on incoming and outgoing mail based on four-month sample, January 1 through April 30 of each of the two years.

20 new committees. The latter figure serves fairly well as an index of organizational complexity, a variable that probably has more bearing than mere size of membership on the functioning of the Central Office.

The total increase in the Central Office staff seems to be more closely related to growth in complexity than to growth in APA membership. Over the long run, at least, such a relation would probably maintain. Over the three-year period in question, however, something peculiar seems to have happened. As our membership approached and passed 10,000, several of our clerical jobs gradually but clearly became too big for one person. In some instances we had to add half a person or a whole person to a job which one person was almost doing alone. In any separate office function, staff increases by discrete jumps. Increase in APA membership, though it appears jumpy to some, is more gradual. With our recent addition of staff, membership should be able to increase by several thousand without causing a breakdown in our present personnel.

The professional staff of the Central Office has increased in three years from five to six and a quarter, or 25 per cent, while the membership was increasing by 43 per cent and the number of committees by 83 per cent.

During the first four months of 1951, we received 27,091 pieces of mail. In 1954 there was only a 20 per cent increase in this figure, despite a 43 per cent increase in membership and an 83 per cent increase in "complexity" of the organization. We received fewer letters per member than we did three years ago. Do new Associates not write as frequently as older members? Are they less participant in Association affairs? Or are they less threatened by this vast bureaucracy and hence not moved to write letters? Are there fewer causes of complaint? Or are there so many that members give up in quiet despair? Actually, of course, we can make no easy inferences from Central Office mail, incoming or outgoing, to members' attitudes or degrees of participation in Association affairs. An enormous amount of APA correspondence, and perhaps the most significant, occurs between and among individual officers and committee members. This correspondence goes on where the Central Office wists not. One might hypothesize that the health of an organization is proportional to the amount of business conducted

in a decentralized manner, with the central mechanisms drawn on only at appropriate and clearly functional occasions.

During the first four months of 1954 we mailed a total of 66,050 communications from the Central Office, on the surface an 86 per cent increase over a comparable datum for 1951. The 1954 figure has a peculiarity in it, however, for it includes the mailing of two official booklets (Public Information Guide, and Psychology and Its Relations with Other Professions) to all members. Since such mailings should not be regarded as annually recurring phenomena, we should probably subtract 24,000 from the figure for outgoing mail and deal with the lesser figure as the more typical one. If we do, we see that our outgoing mail for the sample months has increased only 24 per cent in three years. We are not only, then, receiving in 1954 fewer normal communications per member but are also sending out fewer per member. Is this an indication of creeping impersonality in a growing organization? Or, have we gotten a larger portion of APA affairs sufficiently and adaptively routinized so that life goes on without elaborate correspondence?

During our sample period in 1954, Central Office staff members individually composed 3,560 letters to members and others, an increase of 49 per cent over the comparable figure for 1951. The volume of these "tailor-made" letters has increased more than has APA membership and appreciably more than has the size of the professional staff of the Central Office. These two comparisons suggest that while our correspondential contact with the total membership is decreasing, professional staff members are increasing contact with somebody. The subsequent look at the content of these individually composed letters may reveal something.

Table 2 presents a once-over-lightly tabulation of all the form letters and routine mail leaving the office during the first four months of 1954. While not quite everything the Central Office does ends up licked, stamped, and mailed, a run down of the table does give a quick and fairly accurate overview of the functions of the Central Office. If one adds to these figures a monthly total of 700 local and long distance telephone calls, about 75 sight-seeing and business-laden visitors, a dozen or so conferences or meetings outside the office, with APA members and others, a trip or two out of town, a few speeches, and some very busy man-

TABLE 2
TABULATION OF ROUTINE OUTGOING MAIL FOR
THE FIRST FOUR MONTHS OF 1954

Category	Number
Membership	
Application blanks (Associates, Fellows, foreign, student)	2,226
Letters of welcome to new members	1,401
Mailing of Ethical Standards to new members	1,367
APA structure and functions	
Nominating ballots	12,300
Form letters re final election ballot	220
Ballots for Divisions 1, 5, and 8	1,740
Memorandums to Board of Directors, committee chairmen, division officers, and Council of Rep- resentatives	427
Mailing of Bylaws changes	12,000
Mailing of Public Information Guide and Relations	12,000
Letters and material connected with CSPA	177
Publications	
Employment Bulletin	3,636
Student Journal Group	354
Reprints, invoices, etc.	2,011
Journal binders mailed	178
Cards to Psychol. Monogr. subscribers re schedule of publication	2,500
Rate sheets for journal subscriptions	111
Notices to authors, advertisement, convention calendar	452
Back order journals (separate mailings by APA, and printers)	3,608
Employment	
Placement system, form letters	1,243
Occupational information—free material	430
Finances	
Renewal notices, invoices, new orders re subscrip- tions	853
Division letters and delinquent dues	1,713
Checks and receipts mailed	986
Addressograph bills, journal tapes, etc.	80
Building Fund "Thank you's"	36
Forwarded material	312

days each year at regional and national meetings, the picture is pretty well rounded out.

From January 1 to April 30, 1954, the Central Office people composed, typed, signed, sealed, and sent off in all directions an average of 890 "tailor-made" letters a month. At this rate the four-month total was 3,560 and the annual total will be something over 10,000. Professional members of the staff, who do most of the composing of these

letters, perform them at the rate of about 140 letters each per month or about 1,700 each per year. Table 3 arranges data on the content of these letters and draws a comparison between 1954 figures and comparable ones for 1951.

Well over a third of this most time-consuming kind of correspondence is concerned directly with APA journals. And an additional percentage has an indirect bearing on publication matters (some fraction of letters to committees, to individual members, to the Board of Directors, etc.). It seems eminently clear that APA's major function remains the production and distribution of scientific literature.

The table shows relatively great letter-writing activity in response to questions asked or problems raised by individual members. And the figure of about 100 letters a month concerning committee business seems to indicate a lively—and maybe even constructive—contact between the Central Office and the functioning units of APA government.

Perhaps the most interesting aspects of Table 3's data involve the comparison of 1954 with 1951 letter writing. The table says that our stable functions—handling publications and relating with

TABLE 3

Analysis of Four-Month Sample of Individually Composed Letters from the Central Office

Category	Number 1951	Number 1954	Percentage Increase
Publications	929	1,117	20
Placement system	290	132	-54.5
Letters to nonmembers and or- ganizations	256	445	74
Letters to members answering questions, suggestions, an- nouncements, etc.	245	737	201
Back order department (includ- ing reprints)	220	261	19
APA committees and committee meetings	188	480	155
Divisions	57	66	16
APA representation at functions, to other societies	56	22	-61
Public relations	56	189	238
APA meetings	37	87	135
Board of Directors	33	72	118
Addressograph	32	42	31
Central Office personnel, busi- ness, tax	27	16	-41
Miscellaneous	18	23	25

divisions-go on in 1954 at not very much above their 1951 levels. The increase in publications activity is roughly proportional to the increase in the number of articles published in our journals. And our 17 divisions are stable organizations. Their relating with the Central Office does not vary much, in frequency or flavor, from year to year. But these are the only two functions that seem to have any aura of stability. Everywhere else is change. The Placement System has changed since 1951, moving from a highly individualized system to the employment of a bulletin. It now requires fewer individualized letters but vastly more routine correspondence (see Table 2). There has been a three-year increase of 74 per cent in correspondence with outsiders. This figure may represent the fact that APA is becoming better known as an organization, is directing more of its energies, after its period of adolescent introversion, toward the outside world. That we still concern ourselves primarily with our own insides, however, is indicated by the number of letters to our own members. As a matter of fact there has been a 20 per cent increase since 1951 in the number of "tailor-made" letters to individual members and a 187 per cent increase in letters to committees. The latter fact is connected with the increased number of committees and with the fact that we have moved to supply in the Central Office more adequate professional staff work for committees. Each professional member of the staff has direct if informal connections with one or more committees. Each one seems to have an ambition that "his" or "her" committee turn out the best job in the history of American psychology. Each one writes lettersnondirective, of course-in the attempt to achieve that goal.

The largest relative letter-writing increase since 1951 has been in the area of Public Information. In implementation of actions of the Board of Directors we acquired, in 1952, the part-time services of a professional science writer to serve as our public information consultant. We have taken more and more of his time until now we are using 50 per cent of him. The 238 per cent increase in public information letters is a reflection of this new development. If the Association decided it really wanted to educate the public about psychology, this public information operation could expand indefinitely.

All in all, APA is about the best customer the local post office has. Until APA members tell the

Central Office differently, we will go on cementing relations with the driver of the mail truck.

The simple computations and sentences presented here may possibly seem to reflect in their interstices a desire to tell APA members that Central Office people are very good boys and girls who work hard. Many people like to maintain the illusion of being overworked and underpaid. But equally important to some is the illusion of utility. Any member who may have fallen for the present efforts in behalf of the former illusion and is thereby hesitant about burdening the central mechanisms with his problems or complaints or observations or suggestions is invited to bear in mind that Central Office people have a psychological investment also in the second illusion. Write us a letter sometime.

Undelivered Journals

Speaking of mail, which we were, and often do, there exists a very real problem concerning the best ways to deliver journals to psychologists who, as a general thing, peregrinate regularly. The problem grows out of the following facts:

- 1. Every month about 400 APA members change their addresses, moving on to different and probably greener fields. The Central Office must annually record, or try to, over 4,000 new addresses for old members.
- 2. Under recent hard-boiled changes in postal regulations, the post office will destroy an APA journal unless (a) it is easily deliverable by routine process or (b) the moving subscriber guarantees forwarding postage or (c) APA pays from 8 to 32 cents to have the undelivered copy returned.
- 3. It takes APA four weeks or more to retrieve an undeliverable journal and redirect it to a moved member.
- 4. Members sometimes write in to report that certain journals of two years ago did not reach them. One member recently reported that 21 issues of last year's journals did not reach him. These members paid good money for the journals and they want them.
- 5. It costs APA about \$5,000 a year, or nearly 50 cents a member, to pay postage on undelivered journals and supply members with replacements for issues that evaporated someplace between here and there.

The Publications Board recently wrestled with this problem and decided that maybe APA should emulate the hardness of the post office's boil. Consequently we will no longer replace undelivered copies. Members who wish to replace issues not received through a failure to notify the post office and/or APA of a change of address will have to order those issues through the back order department of this office at the regular back order prices.

The Publications Board suggested that the Central Office fix it so that all of our 12,300 members remember to be orderly when they change jobs or residence or both. This is a tough assignment. Psychologists do not fix easy. They do fix themselves, however. In the present instance, this is an easy assignment—for individual psychologists. All you have to do is:

- Tell the local post office about your new address.
- 2. Guarantee to the post office the payment of forwarding postage on second-class mail.
- 3. Tell APA—at the same time you tell Life, Time, The New Yorker, the Manchester Guardian, and EOMM.

If a psychologist wants to be extra neat about these matters, he should send *two* cards to the Central Office, one for journals and one for the Directory. A sizable number of pretty girls in the office will love him for it.

1955 Dues

This year, APA members will receive early in October their dues bills and subscription order blanks for 1955. There will appear on the form, probably in lurid red ink, a notation saying "Deadline, November 15." Other than that, there is no cause for alarm—unless either the Council of Representatives or one or more divisions come up with a surprise at the September meetings.

In past years, dues bills and journal order blanks

have gone out in November and members were told that the deadline for payment was December 31. About four days after the bills went out, checks normally began to trickle in. The trickle soon grew to a sizable stream, building up quite suddenly to a deluge in the latter half of December. The office never quite found a way to cope with this flood. Each returned form had to be double checked and each remittance cashiered, each bouncy remittance made negotiable, correct information transferred to membership files and to subscription files, correct orders sent to the addressograph room, and a correctly recorded addressograph plate made out for each member. As soon as all this was done for those who remitted by December 31, the January journals could be mailed. There were not enough hours in a day for our trained people to handle all this in a week or less. To bring in parttime employees was expensive in money and in errors. The January journals were late.

Last year we tried to remedy this phrenetic situation by sending out dues bills early in October. We sent them out, but nothing much happened. Psychologists seem inclined to live dangerously—close to the edge of deadlines. They still sent out their APA checks with their Christmas cards (as a matter of fact, some members have sent APA Christmas greetings instead of checks).

This year the Board of Directors voted that the deadline for receipt of remittances be changed to November 15. Journal orders received by that time can properly be processed in the next six weeks and correct mailing tapes can go to our printers by the end of December; January journals will appear on schedule for those who have met the deadline and not a soul in the Central Office will develop more than mild cardiac symptoms.

1955 APA Directory

November 15th is the deadline for receipt of information for the 1955 edition of the APA Directory. The new Directory will be printed in January and will incorporate entries for the 1954 and 1955 Associates. If your existing entry needs to be changed or completed, or if you are a 1954 Associate and haven't sent in your Directory data, please send the necessary information to the Directory office by November 15th. Information needed for your Directory entry is your name, mailing address, highest earned degree (including year and institution), and present position. Changes will be made in the Directory up to the last possible minute. It is unlikely, however, that many can be made after November 15th.

Psychological Notes and News

Mervin A. Durea died September 28, 1953 at the age of 61 after teaching at Ohio State University for approximately 25 years.

Austin P. Guiles, professor at Andover-Newton Theological School, died November 13, 1953.

Wallace Craig died on April 26, 1954.

Siegfried Bernfeld died on April 2, 1953.

Harvey A. Carr, professor emeritus of the University of Chicago, died on June 27, 1954 at the age of 81.

Cecil Lyle Ross, professor of educational psychology at the University of Mississippi, died on August 2, 1954 after a three-month illness. He was 58 years old.

Walter S. Hunter, professor of psychology at Brown University, died August 3, 1954 at the age of 65.

David Shakow, chief psychologist of the Illinois Neuropsychiatric Institute and a professor of psychology at the University of Illinois College of Medicine and the University of Chicago, has been appointed chief of the Laboratory of Clinical, Developmental, and Experimental Psychology at the National Institute of Mental Health. He will develop programs of basic and clinical psychological research for the Institute at the National Institutes of Health in Bethesda, Maryland.

C. M. Louttit, assistant to the provost and professor of psychology at the University of Illinois, has resigned to accept the chairmanship of the department of psychology at Wayne University beginning in September.

Nathan Maccoby has been appointed chairman of the psychology department at Boston University. He will also continue as chairman of the research division of the University School of Public Relations and Communications. Willem J. Pinard, former chairman, will continue as professor of psychology. The psychology department has a faculty of 23 and offers training for the PhD in four areas: experimental, clinical, counseling, and social psychology and personality.

George A. Miller has been appointed associate professor of psychology at Harvard University, beginning in February 1955.

Philip Teitlebaum has been appointed instructor in psychology at Harvard University.

William F. John and Bernard Lyman have been appointed as instructors in psychology at Williams College. Arthur Jenness will be on sabbatical leave of absence during 1954–55. Richard O. Rouse will be acting chairman of the department during Dr. Jenness' absence.

Kenneth A. Chandler has been appointed associate professor and chairman of the department of psychology at the University of Bridgeport.

Norman L. Munn, chairman of the department of psychology at Bowdoin College, was awarded the honorary degree of Doctor of Science by Springfield College, Springfield, Massachusetts, at the commencement exercises in June 1954.

N. W. Shock, chief of the section on gerontology of the Baltimore City Hospitals, was awarded the honorary degree of Doctor of Science by Purdue University at its 102nd commencement last spring "in recognition of his outstanding contributions in the fields of physiology and psychology and for distinguished work in gerontology and public health."

William N. Thetford has accepted an appointment as head of the division of clinical psychology, The Institute of Living, Hartford, Connecticut. Dr. Thetford is discontinuing his consulting work at a senior level with the Government and a three-year association with the Washington School of Psychiatry.

Robert Creegan has been appointed acting chairman of the psychology department at State College, Albany, The State University of New York. Dr. Creegan is also head of the philosophy department. Alfred E. Kuenzli has accepted an appointment as assistant professor of psychology. Dr. Kuenzli is now a postdoctoral student in social relations at Harvard University.

W. H. Roberts has accepted an appointment as coordinator of general education and professor of

social science at Philander Smith College, Little Rock, Arkansas.

Eugene L. Runyon is no longer associated with the Personal Research Institute of Western Reserve University. He is a member of the psychology department faculty of Tennessee Agricultural and Industrial State University.

Manuel Aronson and Earl X. Freed have been appointed to the staff of the Albany Medical College of Union University with the rank of instructor in psychology. Leo Shatin has been appointed as assistant professor of psychology.

William R. Reevy, who was a visiting professor in the department of home economics, University of Arkansas, during the first summer session, has accepted a position with the Richmond Professional Institute of the College of William and Mary. He will be an associate professor in the School of Clinical and Applied Psychology beginning this autumn.

M. Carr Payne, Jr., is joining the staff of the Georgia Institute of Technology as an assistant professor of psychology.

Peter J. Hampton has resigned his position as head of the department of psychology and professor of psychology at Muskingum College to accept the position of director of psychological services and associate professor of psychology at the University of Akron.

Lewis P. Lipsitt, who has been assigned as clinical psychologist at the Lackland Air Force Base hospital in Texas, will be discharged in September to become a student and research assistant in the Child Welfare Research Station, University of Iowa.

Ray S. Musgrave has joined the faculty of Texas State College for Women as professor of psychology in the College of Education, after 15 years as head of the psychology department at Millsaps College in Jackson, Mississippi.

Harry C. Mahan has been released after four years of active duty in the Marine Corps and has accepted a position on the faculty of the Ocean-side Junior College, Oceanside, California.

Frances S. Alexander is changing her status at New York University beginning with the fall semester of 1954 in order to devote more time to private practice. She is giving up her duties as coordinator of clinical training but will continue on the staff as an adjunct associate professor, teaching in the area of psychotherapy.

Arthur W. Combs has accepted a position in the College of Education at the University of Florida beginning in September. He will be a professor of education in the College of Education, but will have a dual appointment in the department of psychology as well.

Zygmunt Piotrowski has joined the staff in the department of research at the New Jersey Neuro-Psychiatric Institute.

Leonard Carmichael, secretary of the Smithsonian Institution, served, by appointment of President Eisenhower, as chairman of the American delegation to an intergovernmental Conference on the Protection of Cultural Property in the Event of Armed Conflict, held at The Hague, Netherlands, in April.

A. S. Edwards has retired from the department of psychology at the University of Georgia. He has accepted a position as associate director of The Broxson Psychological Clinic in Atlanta. Dr. Edwards had been at the University since 1916. He organized the psychology department while in the School of Education and moved it into Arts and Sciences as an independent department; for a number of years he was the only person working in psychology. He built the department up from a one-man department to one which now has seven full-time PhD's on the faculty.

George Soloyanis, formerly clinical psychologist for the Greenville County Mental Hygiene Clinic, has been appointed director of community services for the South Carolina Mental Health Commission. His duties will involve planning institutes and workshops for professional and lay personnel and in general developing a mental health program for the state.

J. Kenneth Little has been appointed Deputy Commissioner of the U. S. Office of Education.

Julian H. Pathman, Chief, Clinical Psychology Service, VA Hospital, Downey, Illinois, and lecturer at Northwestern University, has accepted an award as a Fulbright lecturer at the University of Florence, Italy, for a six-month term beginning January 1955.

Harold Michal-Smith, chief clinical psychologist at Flower and Fifth Avenue Hospitals, New York City, and research associate in pediatrics at New York Medical College, has been invited by the French Government to review the institutions and schools caring for the mentally deficient. Dr. Michal-Smith will report his findings to the American Association on Mental Deficiency, of which he is a Fellow. He left for Flandre on July 27.

George DeVos has received a renewal of his Fulbright grant and will remain in Japan a second year to continue work at the department of neuropsychiatry of Nagoya National University on an interdisciplinary research project studying the relationship of Japanese culture to both normal and psychopathological personality patterns. The Nagoya University department of neuropsychiatry, under the direction of Dr. Tsuneo Muramatsu, has recently received a research grant from the Foundation Fund for Research in Psychiatry of New Haven for a possible three-year period to continue interdisciplinary research in the area of personality and culture.

Reuel L. Fick, associate professor of education and psychology and director of guidance training, University of Hawaii, has taken a year's leave in order to accept a Fulbright award. He will serve as a guest lecturer in educational psychology at the Government Teacher Training College, Karachi, Pakistan, from September 1954 to June 1955. In addition to giving lectures in psychology, he will assist the Ministry of Education in setting up student personnel services in the several teacher training colleges and in initiating guidance work in the secondary schools of the country. C. W. Failor, associate professor and guidance trainer at the University of Colorado, will be Dr. Fick's replacement.

F. Dudley Klopfer was visiting research scientist at the Scripts Institution of Oceanography this summer. He worked on inter- and intraspecific dominance patterns in marine fishes and arthropods.

James H. Elder, chairman of the department of psychology at the State College of Washington, and M. C. Langhorne, who holds a like position at

Emory University, exchanged teaching posts for the summer session of 1954.

William Schofield had a summer appointment as research consultant to the Cooperative Program in Educational Administration at Stanford University.

Arthur Lerner, in addition to his work with alcoholics at the Los Angeles City jail, also taught a summer course at the University of Southern California, entitled "Diagnostic and Corrective Procedures in Teaching."

Fred Brown, chief psychologist, Mount Sinai Hospital, has been made an associate editor of the *Journal of Psychosomatic Medicine*.

Science Research Associates, publishers of psychological tests and guidance materials, announce the appointment of John P. Paisios and Marilyn C. Lee as associate editors in the test department. Mr. Paisios will be responsible for publication titles in the fields of intelligence and aptitude measurement; Miss Lee will be responsible for publication titles in the fields of interest and personality measurement.

James A. Bayton, professor of psychology at Howard University, has received from Secretary of Agriculture Benson one of the Department's Superior Service Awards for "superior accomplishment in the development and application of psychological concepts and techniques in the field of commodity market research and for outstanding ability and leadership in explaining, planning, and supervising consumer and market research."

Carleton F. Scofield will remain on leave during 1954-55 from the psychology department at the University of Buffalo to continue as director of the Psychological Warfare Division of the Human Resources Research Office. Dr. Scofield has resigned as department chairman and Olive P. Lester has been named to succeed him.

Eliot Stellar, assistant professor of psychology at the Johns Hopkins University, joined the department of anatomy and the Institute of Neurological Sciences of the University of Pennsylvania, School of Medicine, as an associate professor of physiological psychology, beginning July 1, 1954. He also has a courtesy appointment as associate professor in the department of psychology.

The University of Pennsylvania announces the establishment of an Institute of Neurological Sciences designed to offer a broad and integrated approach in the study of the nervous system and to train teachers and research personnel in this biological field. The Institute invites applications for fellowships to be awarded annually and to be made available to students with diverse background, seeking a PhD degree in some phase of descriptive and experimental neurological sciences: embryology, anatomy, physiology, biochemistry, pharmacology, and physiological psychology. These fellowships offer a stipend of \$1,200 to \$1,800 per annum with tuition provided. Fellowships are also available for postgraduate investigators (PhD and MD), the stipends to be arranged according to need.

The following are members of the Institute: Louis B. Flexner, MD, director and professor of anatomy; John R. Brobeck, PhD, MD, professor of physiology; William W. Chambers, PhD, associate professor of anatomy; James M. Sprague, PhD, associate professor of anatomy; Eliot Stellar, PhD, associate professor of physiological psychology; Per-Olof Therman, MD, assistant professor of neurophysiology in psychiatry. In addition, there are 17 consulting members from the various disciplines of neurological science who will be active in the work of the Institute.

Detailed information about the Institute may be obtained from the office of the Director of the Institute of Neurological Sciences, Department of Anatomy, School of Medicine, University of Pennsylvania, Philadelphia 4, Pennsylvania.

In the Florida Center of Clinical Services, Darrel J. Mase, coordinator, announces the appointment of David Lane as associate in The Psychological Clinic and associate professor of education. In addition to Dr. Lane, the staff of The Psychological Clinic consists of Justin E. Harlow, Jr., head; Richard J. Anderson; Albert M. Barrett; James C. Dixon; Elmer D. Hinckley; and Daniel W. Soper, associates. Irene P. Sabo is a clinician.

Other members of the American Psychological Association in the Florida Center of Clinical Services are: George Spache, head of the Reading Laboratory and Clinic; Paul C. Berg, associate in the Reading Laboratory and Clinic; Bruce Thomason, associate in the Marriage and Family Clinic. W.

Max Wise is dean of the Division of Student Personnel in which the Center operates.

In the department of psychology at Yale University Irvin L. Child and Seymour B. Sarason have been promoted to the rank of professor. Arthur R. Cohen and Milton J. Rosenberg of the University of Michigan have been appointed assistant professor. Both men are in the field of social psychology, and part of their time will be devoted to interdisciplinary instructional programs at the undergraduate level. Joel R. Davitz of the University of Illinois has been appointed assistant professor in the field of clinical psychology. William H. Kessen and Martin Kohn, presently U. S. Public Health postdoctoral fellows at Yale, have been appointed assistant professors in child development, to collaborate with the Child Study Center in developing both research and instructional programs. The title of Robert P. Abelson has been changed from research assistant to assistant professor. Gerald E. McClearn of the University of Wisconsin has been appointed instructor, and John A. Carpenter of Brown University has been appointed research assistant in psychology, to work with the staff of the Center for Alcohol Studies. In addition, from the West Haven VA Hospital John M. Rakusin and Julius Laffal have been affiliated with the department with the rank of clinical instructor. Burton S. Rosner, who has been assistant professor in the department, will retain the title of clinical assistant professor in his new post at the West Haven VA Hospital. Leonard W. Doob has taken a 15-month leave of absence to do research in British East Africa; his work will be taken over during the second semester of this year by Donald T. Campbell of Northwestern University. John Williams of the University of Iowa has accepted an appointment as research assistant in psychology (psychiatry).

The Institute of Child Welfare of the University of Minnesota announces that John E. Anderson has transferred from his post as director to a professorship in the Institute. Professor Anderson requested relief from his administrative responsibilities in order to devote full time to research and graduate instruction. Dale B. Harris has been appointed director of the Institute, effective July 1, 1954. Communications that concern the Institute of Child Welfare should hereafter go to Dr. Dale B. Harris, Director, Institute of Child

Welfare, University of Minnesota, Minneapolis 14, Minnesota.

Marion E. Bunch, chairman of the department of psychology of Washington University, will serve as the APA representative at the conference on Equality of Opportunity in Higher Education to be conducted by the American Council on Education in St. Louis, November 15 and 16.

Howard Mitchell represented the APA at the American Association of Psychiatric Social Workers' institute on standards of social service in psychiatric hospitals, held June 12–18, 1954 at Lake Forest Academy, Lake Forest, Illinois.

Bernard Rashap has assumed the position of clinical psychologist at Wallkill Prison, Wallkill, New York.

Henry N. Ricciuti has resigned as research associate, Educational Testing Service, Princeton, New Jersey, in order to accept an appointment to the staff of the Child Research Council, University of Colorado School of Medicine in Denver.

Herbert E. Dawson, formerly with the Office of Naval Research, psychology department, Indiana University, has recently joined the human engineering group of the H. L. Yoh Company in Philadelphia.

Leonard R. Witt, formerly with the New York State Employment Service in Hempstead, New York, has been appointed parole employment officer in the Albany District Office of the New York State Executive Department, Division of Parole.

Morton Wiener, formerly staff psychologist at LaRue D. Carter Memorial Hospital, Indianapolis, Indiana, has been appointed chief psychologist of Central State Hospital in Indianapolis. Other members of the staff at Central State Hospital are Earl Furlow, Paul Bruce Carpenter, and Janeth Turner Carpenter. Psychology interns are Irving Haber, Roosevelt College, and Myrna Kaplan, formerly of Butler University.

Robert S. McCully has been appointed administrative supervisor of the psychology department in the neuropsychiatric service at the United States Naval Hospital, Portsmouth, Virginia.

The Des Moines Child Guidance Center announces that Charles Heineman, clinical psycholo-

gist at the Center, has left to take a position with a new community child guidance center in Fort Wayne, Indiana. Rodman Kabrick, formerly on the staff of the University Hospitals at Iowa City, has been appointed clinical psychologist.

Manuel N. Brown, formerly chief counseling psychologist at VA Hospital, Vancouver, Washington, is now chief clinical psychologist at the Minnesota State Prison at Stillwater where he will be responsible for initiating a psychological program.

James G. Jones, Jr., has transferred from the central staff training department of the Ford Motor Company to become manager of the training department of the Ford International Division in New York City.

John E. Robinson, Jr., has joined the staff of the Personnel Research Branch, Personnel Research and Procedures Division, The Adjutant General's Office, Washington, D. C. Mr. Robinson recently completed three years' service as research analyst at The Adjutant General's School, Fort Benjamin Harrison, Indianapolis, Indiana.

Charles W. Hill (Colonel, U. S. Army) has been assigned to Headquarters, U. S. Army, Europe in Germany. For the past three years he has been Chief, Human Relations and Research Branch, Department of the Army. Spencer P. Edwards (Lt. Col., U. S. Army) is the new chief of this branch, which provides technical supervision and coordination for the various psychological research agencies within the Army. Lynn E. Baker remains as scientific advisor to the branch chief.

The psychology department of St. Vincent's Hospital of New York City has been expanding in services and personnel since its inception in January 1947. Presently, the department includes Walter J. Coville, chief clinical psychologist; Benjamin S. Alimena, senior clinical psychologist, formerly of Catholic Charitical Guidance Institute and Manhattan College; Harold V. Poland, clinical psychologist, formerly of the Department of Correction of New York City; George J. Becker, clinical psychologist, formerly of Lincoln Hall Training School, Lincolndale, New York.

Milledgeville State Hospital announces that Robert Wildman was appointed junior clinical psychologist effective September 1953. Herbert Quay was promoted from junior clinical psychologist to clinical psychologist, effective April 1954. Mary Fretwell and James B. Morris continue as clinical psychologist and John T. Rowell as chief clinical psychologist.

Donald H. Bullock has joined the staff of H. L. Yoh Company, Inc., Industrial Consultants, Philadelphia, Pennsylvania, as an experimental psychologist in human engineering. He was formerly an assistant professor of psychology at the University of Buffalo and a consulting staff psychologist with Stanley Aviation Corporation, Buffalo, New York.

John D. Staley is personnel manager at the Peter J. Schweitzer Corporation. He was formerly in Rutgers University's Institute of Management and Labor Relations.

Gordon D. Pred has joined the staff of Health Service, Inc., and Medical Indemnity of America, Inc., in their Chicago executive offices.

Edward Glaser & Associates, psychological consultants, Pasadena, California, announce that Thomas Gordon, formerly associate professor in psychology at the University of Chicago, has joined the firm as a full-time associate.

The Dr. Norman M. Beatty Memorial Hospital, Westville, Indiana, announces that G. Rex Hurt has been appointed acting director of the psychology department. Members of the department now include Milton Minas, Fred Stern, John Lowenfeld, and Quentin Sabotta.

Rudolf Lassner has resigned his position as chief psychologist at the Child Study Institute of the Family Court in Toledo to accept the appointment of chief, psychology department of Delaware State Hospital and Mental Hygiene Clinics, Farnhurst, Delaware.

Ben Bursten has resigned as psychologist with the clinic of the Bridgeport (Connecticut) Society for Mental Hygiene in order to study medicine at the Yale University School of Medicine. The new psychologist with the Society is Justin Koss, who was formerly with Kings Park State Hospital in New York.

A. W. Jeffreys, Jr., has recently been appointed chief psychologist at Western State Hospital, Staunton, Virginia.

Walter A. Fabian, Jr., was erroneously listed as a new appointee to the staff of the VA Regional Office, Albany, New York in the May American Psychologist. At present he is employed as a clinical psychologist at the University of Buffalo Chronic Disease Research Institute, Physical Medicine and Rehabilitation Department.

Daniel M. Goodacre, III, formerly a conference leader in the Akron Training Department of the B. F. Goodrich Company, has been appointed to the newly created position of industrial research psychologist in the Akron Training Department.

Earl S. Schaefer has been appointed to the regular corps of the United States Public Health Service. Dr. Schaefer received this appointment by virtue of the standing which he attained in the national competitive examinations. He has a position as a research psychologist in the Clinical Center of the National Institute of Mental Health and has been a member of the reserve corps of the Public Health Service for approximately one year.

Nathan B. Winstanley, Jr., has joined the staff of The Personnel Laboratory, Inc., in New York City, in the capacity of vice-president and director of personnel services.

J. Clifford Holmes has been advanced from the position of guidance consultant in the Junior Division and Counseling Service, University of Nebraska, to assistant director.

Roger T. Lennon has been elected to the Board of Directors of World Book Company, Yonkerson-Hudson, New York. Dr. Lennon heads the Division of Test Research and Service at World Book Company.

Marguerite L. Alstrom has been appointed personnel director of the Wynn Oil Company, Azusa, California.

Paul Imre, formerly chief psychologist at the Mental Health Institute, Cherokee, Iowa, is now staff psychologist at Spring Grove State Hospital, Catonsville, Maryland.

Frederick Gehlmann has joined A. T. Kearney & Company, management consultants, in Chicago. He is a member of the firm's industrial and personnel staff.

The Psychiatric Institute of Beverly Hills is sponsoring a one-year study trip in Europe by Rudolph J. Brandt. Dr. Brandt is studying latest trends in psychotherapy and clinical psychology.

The American Institute for Research announces the following appointments to its research staff: Harold E. Bamford, formerly on the staff of the Air Force Personnel and Training Research Laboratory, has been appointed research psychologist. Two other newly appointed research psychologists are Robert F. Schweiker, who was previously associated with Educational Research Corporation, and Robert E. Corrigan, formerly a member of the staff of the Southeast Louisiana Hospital at Mandeville, Louisiana. William E. Feroglia of the University of Washington has been appointed research associate.

Raymond H. Burros, now assistant professor of psychology at the University of Illinois, is leaving to accept an appointment as visiting professor of psychology at the University of Houston for the academic year 1954–55. Dr. Burros' major responsibility will be teaching of statistics and quantitative methods.

VA DEPARTMENT OF MEDICINE AND SURGERY ANNOUNCEMENTS

Clinical Psychology

Robert P. Barrell has transferred from VA Hospital, New Orleans, Louisiana to VA Hospital, Downey, Illinois.

Irving Bialick has transferred from VA Hospital, Nashville, Tennessee, to VA Hospital, Kansas City, Missouri.

Robert C. Bleke has resigned from the staff of VA Hospital, Durham, North Carolina, to accept a position with Rohrer, Hibler and Replogle.

Albert A. Branca has been promoted to the position of Chief Clinical Psychologist, VA Hospital, Fayetteville, North Carolina.

Thelma E. Brown has transferred from VA Hospital, Ft. Thomas, Kentucky, to the position of Chief Clinical Psychologist, VA Hospital, Cincinnati, Ohio.

Joel M. Cantor has resigned from the staff of VA Center, Sioux Falls, South Dakota, to accept a position with the Los Angeles County General Hospital. Mary Lively Clarke, a graduate of the VA Training Program, Duke University, has been appointed to the staff of VA Hospital, Durham, North Carolina.

Richard C. Cowden, a graduate of the VA Training Program, University of Tennessee, has been appointed to the staff of VA Hospital, Gulfport, Mississippi.

John M. Dailey, a graduate of the VA Training Program, University of Iowa, has been appointed to the staff of VA Hospital, Palo Alto, California.

Roy A. Eck, Jr., a graduate of the VA Training Program, University of North Carolina, has been appointed to the staff of VA Hospital, Roanoke, Virginia.

Herman Feifel has transferred from VA Hospital, Topeka, Kansas, to VA Regional Office, Los Angeles, California.

Harold J. Fine, a graduate of the VA Training Program, Stanford University, has been appointed to the staff of VA Mental Hygiene Clinic, Bridgeport, Hartford Regional Office, Connecticut.

Bernard J. Fitzgerald, a graduate of the VA Training Program, Ohio State University, has been appointed to the staff of VA Hospital, Roanoke, Virginia.

William E. Fordyce has transferred from VA Regional Office, St. Paul, Minnesota, to VA Hospital, Seattle, Washington.

John O. Grimmett, a graduate of the VA Training Program, Pennsylvania State University, has been appointed to the staff of VA Hospital, Tomah, Wisconsin.

Cecil K. Harbin has transferred from VA Mental Hygiene Clinic, Knoxville, Tennessee, to the position of Chief Clinical Psychologist, VA Regional Office, Atlanta, Georgia.

Ruth Harrell has been appointed to the staff of VA Hospital, Kecoughtan, Virginia.

Marvin Hersko, a graduate of the VA Training Program, University of Illinois, has been appointed to the staff of VA Regional Office, Miami, Florida.

Ernest Hirsch has resigned from the staff of VA Hospital, Topeka, Kansas to accept a position with the Menninger Clinic.

Leonard Horwitz has resigned from the staff of VA Hospital, Topeka, Kansas, to accept a position with the Menninger Clinic. Mary Grier Jacques has transferred from VA Hospital, Hines, Illinois to the staff of VA Hospital, Chicago, Illinois (Research).

Gerald F. King, a graduate of the VA Training Program, Michigan State, has been appointed to the staff of VA Hospital, Battle Creek, Michigan.

James E. Lindeman, a graduate of the VA Training Program, Pennsylvania State University, has been appointed to the staff of VA Hospital, Perry Point, Maryland.

Bernard Locke has transferred from VA Regional Office, Brooklyn, New York, to the position of Chief Clinical Psychologist, VA Hospital, New York, New York.

Joseph Lyons has transferred from VA Hospital, Indianapolis, Indiana to VA Hospital, Topeka, Kansas.

Julian Meltzoff has transferred from the staff of VA Hospital, Philadelphia, Pennsylvania to the VA Regional Office, Brooklyn, New York as Chief Clinical Psychologist.

Francis Moriarty has been promoted to the position of Chief Clinical Psychologist, VA Hospital, Topeka, Kansas.

Jack J. Newberry, a graduate of the VA Training Program, Northwestern University, has been appointed to the staff of VA Regional Office, St. Paul, Minnesota.

Leonard Oseas has transferred from VA Hospital, Chicago, Illinois to VA Regional Office, Cincinnati, Ohio.

Paul Pruyser has been appointed to the staff of VA Hospital, Boston, Massachusetts.

Robert L. Romano, a graduate of the VA Training Program, Washington University, has been appointed to the staff of VA Hospital, Pittsburgh, Pennsylvania.

Saul R. Rotman, a graduate of the VA Training Program, Boston University, has been appointed to the staff of VA Hospital, Sunmount, New York.

W. Neil Shelton has resigned from the staff of VA Hospital, Memphis, Tennessee, to accept a position with the U. S. Naval Hospital, Memphis, Tennessee.

Ralph G. Semon has been appointed to the staff of VA Regional Office, Boston, Massachusetts.

Mimi J. Spielberg has been appointed to the staff of VA Regional Office, Albany, New York.

Murray S. Stopol has resigned from the staff of VA Hospital, Minneapolis, Minnesota to accept a position with the Hamm Memorial Clinic, St. Paul, Minnesota.

Norman Tallent has been appointed to the staff of VA Hospital, Kecoughtan, Virginia.

Frederick J. Todd has transferred from the staff of VA Regional Office, Denver, Colorado to VA Hospital, Topeka, Kansas.

Arnold Trehub, a graduate of the VA Training Program, Boston University, has been appointed to the staff of VA Hospital, Northampton, Massachusetts.

John E. Tucker has transferred from VA Hospital, Lyons, New Jersey, to the position of Chief Clinical Psychologist, VA Regional Office, Albany, New York.

Marvin W. Webb has returned from military leave to his position as Chief Clinical Psychologist at Bay Pines, Florida, VA Center.

J. Frank Whiting has transferred from VA Center, Martinsburg, West Virginia to the position of Chief Clinical Psychologist, VA Hospital, Rutland Heights, Massachusetts.

Don L. Winfield has resigned from the staff of VA Hospital, Memphis, Tennessee, to accept a position as Director, EEG and Psychological Laboratory, Children's Hospital, Memphis, Tennessee.

Counseling Psychology

William C. Stevens, a graduate of the University of Minnesota, has been appointed to the staff of VA Hospital, Perry Point, Maryland.

Frank B. Martin, Jr., a graduate of the VA Counseling Psychology Training Program, Ohio State University, has been appointed to the position of Chief, Vocational Counseling Service, VA Hospital, Chillicothe, Ohio.

Samuel Wexler has transferred from the staff of VA Hospital, Long Beach, California, to the position of Chief, Vocational Counseling Service, VA Hospital, Pittsburgh, Pennsylvania.

Carl J. Gulde, a graduate of the University of Houston, has been appointed to the staff of VA Hospital, Houston, Texas.

John E. Muthard, formerly on the faculty of Emory University, has been appointed to the position of Chief, Vocational Counseling Service, VA Hospital, Danville, Illinois. Victor Ruderman, formerly with the Federal Penal and Correctional Institute, Danbury, Connecticut, has been appointed to the staff of VA Hospital, Montrose, New York.

Albert R. Hahn, formerly in private practice, has been appointed to the staff of VA Hospital, Montrose, New York.

John E. Westeen, a graduate of the University of Southern California, has been appointed to the position of Chief, Vocational Counseling Service, VA Hospital, San Fernando, California.

Manuel N. Brown has resigned as Chief, Vocational Counseling Service, VA Hospital, Vancouver, Washington.

Edwin H. Richardson has resigned as Chief, Vocational Counseling Service, VA Hospital, Lexington, Kentucky.

W. Frank Caston has resigned as Chief, Vocational Counseling Service, VA Hospital, Augusta, Georgia.

The American Board of Examiners in Professional Psychology, Inc., conducted oral examinations at Los Angeles, Chicago, Detroit, and Boston during the spring and early summer of 1954.

The total oral examination included a Professional Field Situation and the following four parts:

Client Relations:

A. Diagnosis or evaluation. (The definition of the problem faced by the professional psychologist)

B. Therapy and/or recommendations. (How to deal with the professional problem)

Scientific and Professional Relations:

C. Skill in the interpretation and use of research findings. (What valid knowledge exists about the problems faced. How valid knowledge is obtained)

D. Organization and administrative problems of professional psychology. (What are the conditions of acceptable professional practice)

The Board wishes to express its appreciation to the following diplomates who served as members of its oral examining teams for the above-mentioned examinations: Thelma G. Alper, Charles R. Atwell, Nancy Bayley, Samuel J. Beck, Hugh M. Bell, John E. Bell, Roger M. Bellows, Chester C. Bennett, William C. Biel, Hedda Bolgar, Norman T. Bowes, Katherine P. Bradway, Roy Brener, James F. T. Bugental, Burton M. Castner, Hubert S. Coffey, Orlo L. Crissey, Solomon Diamond, Herman Feifel, Angela Folsom, Sol L. Garfield, Edward M. Glaser, Eugenia Hanfmann, Ralph W.

Heine, Elizabeth M. Hincks, Howard F. Hunt, Leota L. Janke, James S. Karslake, David B. Klein, Mary S. Kunst, Donald B. Lindsley, Morse P. Manson, Mortimer M. Meyer, Julian H. Pathman, Frances C. Perce, Leslie Phillips, Elias H. Porter, Donald A. Ramsdell, A. K. Rosenwald, Audrey S. Schumacher, Pauline S. Sears, Georgene H. Seward, Morris I. Stein, Keith Sward, J. Warren Thiesen, Clare W. Thompson, Evelyn Troup, Read D. Tuddenham, Ruth Valentine, Ralph O. Van Waters, Neil D. Warren, Milton Wexler, Howard R. White, Greydon M. Worbois, G. K. Yacorzynski, and Robert A. Young.

Also, the Board wishes to recognize and to express its appreciation to the following former members of the Board who served as chairmen of examining teams: John G. Darley, Jean W. Macfarlane, and Fred L. Wells.

The University of Minnesota will present a continuation course in The Use of the Minnesota Multiphasic Inventory next October 14 to 16 at the Center for Continuation Study on the University of Minnesota campus. The course is intended primarily for clinical psychologists but will also be open to psychiatrists and other physicians who may be interested in the use of the MMPI. Guest faculty will include George Welsh and Harrison Gough. The course will be presented under the direction of Starke R. Hathaway, professor and director, division of clinical psychology, and the remainder of the staff will be drawn from the faculty of the University of Minnesota. Lodging and meal accommodations are available at the Center for Continuation Study.

A bibliography on psychological literature on frustration and conflict has been prepared by a graduate seminar in the psychology department at the University of Hawaii. One hundred copies are available for free distribution from Professor Edgar Vinacke, Department of Psychology, University of Hawaii, Honolulu 14, Hawaii.

At the Sixth Annual Meeting on June 13, 1954, of the New York Society of Clinical Psychologists, Inc., an annual award for "outstanding contributions to the science and profession of clinical psychology" was presented to Gardner Murphy, director of research, The Menninger Foundation. Dr. Murphy's address of acceptance focused on a number of developing needs in the field of clinical psychology, particularly in relation to the evaluation of individuals in training in the profession.

The officers of the Society for 1954–1955 are as follows: Emanuel K. Schwartz, president; Theodora M. Abel, president-elect; Max Siegel, past-president; Samuel Pearlman, executive secretary; Thomas E. Tierney, treasurer. The other members of the executive board are: Sylvia Brecher, Albert Ellis, Samuel H. Flowerman, Florence Halpern, Harry V. McNeill, Jule Nydes, Percival M. Symonds, Arthur Teicher, and Brian M. Tomlinson.

On May 14 and 15, the Oregon Psychological Association and the Washington State Psychological Association held a joint meeting at the State College of Washington. Approximately 90 persons attended the sessions, which included two symposia and 13 contributed papers. Frederick Courts is the new president of the Oregon association and David Ehrenfreund, of the Washington association.

The North Dakota Psychological Association held its first meeting on June 11, 1954, at the State Hospital in Jamestown, North Dakota. Officers elected for the 1954-55 term were: Hermann F. Buegel, president; William F. Bublitz, president-elect; Mildred J. Treumann, secretary; W. Lynn Smith, treasurer; C. L. Kjerstad, memberat-large of the executive committee for a one-year term; and Ruth J. Tasch, member-at-large of the executive committee for a two-year term. It was decided that the NDPA would hold two meetings per year, with the first one to be held at Bismarck during the third week in October and another at Grand Forks during the second week in May. It is planned that these two meetings will be devoted to an instructional program on recently developed techniques in clinical psychology and counseling.

The new officers of the Ohio Psychological Association are: James R. Patrick, president; Persis W. Simmons, president-elect; Mary Alice Price, secretary; Milton W. McCullough, Board of Examiners.

The Nassau County (New York) Psychological Association has elected the following new officers: Katherine D'Evelyn, president-elect; Verda Wentling, recording secretary; Loron Simon, treasurer; and Julia Vane, corresponding secretary. Martin Singer has assumed the presidency, a post to which he was elected the previous year.

Kenneth L. Smoke has been re-elected national president of Psi Chi, psychological honorary so-

ciety; Philip Worchel has been re-elected vicepresident for the southern region. The new vicepresident for the midwestern region is Robert J. Wherry.

On October 16, 1953, in a meeting at Nurnberg, the Society for the Study of Human Work (Gesellschaft für arbeitswissenschaftliche Forschung) was established. The basic and distinguishing idea underlying the formation of the Society is the necessity for an interdisciplinary approach to this important and complex problem. The following disciplines are represented: physiology (E. A. Müller), psychology (von Bracken), education (H. Rupp), sociology (Specht), and engineering (H. Kellner). The Society held its first congress on March 16 to 18, 1954. The two principal themes were (a) the present status and impending tasks of the disciplines concerned with human work, and (b) man's readiness to perform (Leistungsbereitschaft). The Society will utilize the Zentralblatt für Arbeitswissenschaft und soziale Betriebspraxis as its house organ. The address of the secretariat is München 16, Georgenstrasse 22, Germany.

The Nineteenth Educational Conference will be held on October 28 and 29, 1954, at the Roosevelt Hotel in New York City. The conference is again sponsored by the Educational Records Bureau and the American Council on Education. The theme of the conference will be "Education in a Free World." For further information, write to Arthur E. Traxler, Educational Records Bureau, 21 Audubon Avenue, New York 32, New York. The printed program will be available early in October.

A new national society, The Institute of Management Sciences, has been established with the objective of unifying scientific knowledge that contributes to the understanding and practice of management. The Institute will publish a journal, Management Science, which will include research papers and survey papers dealing with scientific analysis and theory of management. C. W. Churchman, of Case Institute of Technology, has been appointed managing editor. W. W. Cooper, Carnegie Institute of Technology, has been elected president of the Institute. Information on membership or subscriptions to the journal can be obtained from George Kozmetsky, Litton Industries, Beverly Hills, California.

Publication of the 1954 Directory of Approved Vocational Counseling Agencies has been announced by the American Personnel and Guidance Association. This is the first complete directory published since 1951 and includes 170 agencies in 94 cities in 29 states, Puerto Rico, and Canada. Copies are available for \$1.00 each from the APGA, 1534 O Street N.W., Washington 5, D. C.

The Institute for Associated Research reports that its perceptual demonstration units are now used by over 140 research centers in the United States and 19 other countries for both teaching and experimental research purposes. A Perception Demonstration Center was set up in March as part of the new Psychology Research Center being created at Princeton University. All of Adelbert Ames's demonstrations have been assembled there, as well as the E. K. Hall Memorial Alcove, which contains publications and memoranda concerning the work and literature from a variety of fields. The Center is open to visitors by appointment.

The research work and management of the Institute are being centralized at Princeton University by Hadley Cantril, president; F. P. Kilpatrick, W. H. Ittelson, and Charles Slack. The University has received a \$75,000 grant from the Rockefeller Foundation for a long-range research program in human behavior. Other funds have been made available from the Quaker Hill Foundation, the Office of Naval Research, and the Inwood Institute. John Pearson, former managing trustee of the Institute, has retired from it; Mr. Ames is continuing as a consultant.

The Institute for Associated Research is being dissolved as a legal corporation and its Hanover, New Hampshire headquarters have been closed. All correspondence should now be addressed to Professor Hadley Cantril, Box 587, Princeton, New Jersey or to one of the other members at Eno Hall, Princeton, New Jersey. Equipment or demonstrations will be made by Mr. Kimball Whipple, 35 East Wheelock Street, Hanover, New Hampshire. Inquiries concerning prices should be sent directly to him.

The University of Cagliari in Italy is setting up a department of psychology and a psychological laboratory under Professor Giorgio Zunini. The department badly needs apparatus and psychological literature. Any psychologist who has copies of journals and books which he no longer

needs and would like to contribute to this University should mail them to the Psychological Institute, University of Cagliari, c/o American Psychological Association, 1333 Sixteenth Street N.W., Washington 6, D. C. The APA office will arrange to ship them to Italy.

The psychology department of Crownsville State Hospital announces its Third Annual Workshop which will take place on October 21, 22, and 23. This workshop will be conducted by Roy Schafer, chief psychologist at Yale University School of Medicine. Dr. Schafer will discuss advanced theoretical aspects of psychological testing and present special cases. The registration fee is \$10.00. Housing is available. For further information write to Vernon W. Sparks, Chief Psychologist, Crownsville State Hospital, Crownsville, Maryland.

The Conference on Jewish Relations invites its members and all interested social scientists, including students in the social sciences, to a Conference on American Jewish Sociology, on Saturday evening, November 27 and all day Sunday, November 28, 1954, at the Hotel Commodore in New York City. There will be three round-table sessions and a luncheon meeting in which a number of social scientists and community leaders are scheduled to participate. The topics of the sessions are: Forms and Expressions of Jewish Identification (the psychology of belonging); The Changing Structure of the Jewish Community (patterns of leadership and participation); Jews and Their Neighbors (majority-minority interaction in America), and Support for Jewish Cultural Research (aims and plans of the Conference on Jewish Relations). For a complete program and further information, write to the Conference on Jewish Relations, Inc., 1841 Broadway, New York 23, New York.

The Social Science Research Council sponsored a summer, inter-university research seminar at Brandeis University on problems of bridging the gap between field studies and laboratory experiments on social behavior. Seven psychologists and sociologists from four universities assisted in planning research designed to test findings from laboratory research in natural situations, or vice versa. The participants were: Henry W. Riecken, chairman, and Leon Festinger, both from the University of Minnesota; Nicholas J. Demerath and John

W. Thibaut, University of North Carolina; Morton Deutsch and Richard Christie, New York University; and Gilbert Krulee, Tufts College.

The University of Miami and the United Cerebral Palsy Association of Miami announce a one-day workshop to be held at the Cerebral Palsy Clinic on October 23, 1954. This Workshop will be devoted to problems of psychological evaluation of the cerebral palsied person. The program is under the supervision of Robert M. Allen, professor of psychology, University of Miami and psychology consultant, United Cerebral Palsy Clinic of Miami. Marjorie Collins, chief psychologist of the Clinic will speak on problems in evaluative techniques, and Jack A. Kapchan, assistant professor of psychology, University of Miami and associate consultant, will discuss problems and techniques of individual and group therapy. Other participants will include Jacques Gottlieb, chairman of the department of psychiatry and neurology of the University of Miami School of Medicine and Howard A. Engle, medical director of the United Cerebral Palsy Clinic of Miami. Workshop will be open to psychologists in the State of Florida who are interested in working with the cerebral palsied child and adult.

Three workshops in pastoral psychology, sponsored by the Institute of Mental Health at St. John's University, Collegeville, Minnesota, were held in August as the first in a series of summer educational programs for clergymen and teachers.

On the program of the Inservice Training Seminar in Counseling Psychology (Vocational) held at the Veterans Administration Hospital, Coatesville, Pennsylvania on June 10-11, 1954 were Edward J. Shoben, who spoke on "Research in Counseling Psychology"; John W. Gustad, who spoke on "Recent Developments in Tests and Measurement Techniques"; and Edward A. Strecker who made some "Remarks on Psychotherapy and Vocational Adjustment." Many counseling psychologists from VA hospitals along the East Coast were welcomed by Hugo Mella, Manager, and by Robert S. Waldrop with a message from Central Office. The conference was arranged by John C. Phillips, chief counseling psychologist at the Coatesville Hospital, who not only stated the seminar objectives but also served as a panel member. His two associates, Edwin S. Raub and Samuel F. Klugman, also appeared as panelists.

During the week of May 10, 1954, Dunlap and Associates, Inc., of Stamford, Connecticut presented its second Human Engineering Institute. The Institute was a 5-day course dealing with the design of equipment, products, and work stations with emphasis on human limitations and capacities. Engineers, designers, and product planners from such organizations as American Machine and Foundry, Convair, Cook Research Labs, DuPont, Engineering and Research Corporation, General Electric, M. J. Johnson Aircraft, Glenn L. Martin, and Motorola attended. Bernard J. Covner was director, and the following staff members were instructors: E. Bishop, R. Casperson, J. Coakley, J. Dunlap, J. Ely, J. Orlansky, R. Schreiber, L. Thomas, R. Thomson, M. Tolcott, J. Wissell, and K. Yarnold. Guest speakers included Wallace H. Wulfeck of William Esty Company, John Fleming of The Bristol Company, Alex Javitz of Electrical Manufacturing, and Robert MacNeil of Electric Boat Company.

A symposium on Research in the Psychological Aspects of Chronic Disease and Physical Disability, sponsored by the VA Hospital, San Fernando, California and the VA Research Committee, Los Angeles, was held at the San Fernando VA Hospital on June 25.

At the 1954 Western Psychological Association meeting several "conventionites" decided to form an organization of psychologists and sociologists who are interested in, or actively conducting research on, small group behavior. The aim of the organization will be to facilitate communication about research and theory through such activities as conferences, newsletters, and the exchange of preliminary drafts of articles and reports. Any West Coast psychologists who would like to join this group or desire additional information should write to Allan Katcher, Department of Psychology, University of Washington, Seattle 5, Washington.

The Individual Psychology Association of New York, Inc. announces that it has been granted a New York State license to operate the Alfred Adler Consultation Center as a mental hygiene clinic. Alexandra Adler is medical director; Danica Deutsch, executive director; Ernst Papanek, co-director; Warner L. Lowe, assistant director; Joseph LeBoit, senior psychologist; Emma Weissmann, psychiatric social worker.

Human Biology, founded in 1929 by the late Raymond Pearl, will be published by the Wayne University Press, under the editorship of Gabriel Ward Lasker, assistant professor of anatomy, Wayne University College of Medicine. This 26-year-old quarterly will continue to be a "record of research," with special emphasis on the biometry and growth of man and the other primates. The annual subscription rate will remain five dollars. Subscriptions may be placed with the Wayne University Press, 4841 Cass Avenue, Detroit 1, Michigan. Manuscripts for consideration should be sent to Dr. Gabriel Lasker, 1401 Rivard Street, Detroit 7, Michigan.

An inexpensive binding for psychological journals. A member of the Association writes that journals can be bound together very satisfactorily by a liquid-plastic glue sold under the trade name of Book-saver by Delkote, Inc., 1419 Faulk Road, Wilmington 99, Delaware. Two applications of the glue securely hold separate issues together and should last several years. Cost of the product is \$1.95 plus postage for 8 ounces, which can "bind" approximately 50 volumes of journals—a cost of less than 5 cents per journal.

The University of Missouri's department of psychology has received a USPHS training grant to begin a doctoral program in clinical psychology starting with the September 1954 term. Thomas Pustell, formerly of the University of Michigan, has joined the staff as assistant professor and assistant clinical psychologist in the University's Mental Hygiene Clinic. Fred McKinney, departmental chairman, will head a clinical training committee.

Sumner C. Hayward, assistant professor of psychology and education at Carleton College, has received a research grant of \$850 from the American Philosophical Society to carry on his experimentations into the effect of early-induced trauma on the later behavior of the mature albino rat.

The Rockefeller Brothers Fund has given a grant to the American University of Beirut, Lebanon, for research in human relations, with particular attention to problems of westernization among peoples of the Near East. E. T. Prothro, associate professor of psychology at Brooklyn College, has been given leave of absence to go to Beirut to help inaugurate the research program.

The Instructional Film Research Program of the Pennsylvania State University has received a grant from the Carnegie Foundation for the support of doctoral research in the area of mass communications, particularly sound motion pictures. The first appointments have been made to Edwin F. Lefkowith, Myron Robinson, and Robert E. Stover. Applications for appointment or requests for further information should be sent to Dr. C. R. Carpenter, Director.

The Educational Testing Service has announced that its 1954 fellowships for graduate study in psychology at Princeton University have been awarded to Robert F. Boldt and Donald P. Estavan. The visiting psychometric fellowship to John Keats has been extended for a second year through a grant from the Carnegie Corporation of New York. Announcement also is made by the Educational Testing Service of the reappointment as psychometric fellows of Norman Cliff, Bertram Karon, Anton Morton, and Robert Sadacca.

The Kenneth W. Braly Award Committee of Psi Chi, national honorary society in psychology, announces the 1954 grant of \$200 to Bernard Moskowitz of the University of Oklahoma. Mr. Moskowitz is a graduate of Brooklyn College and holds an MA from the University of Nebraska. He was honored for his work on the psychological aspects of energetics. The Kenneth W. Braly Foundation fund was set up by friends of the late head of the Advisement Center of the Los Angeles City Schools. Dr. Braly was a charter member of the University of Nebraska chapter of Psi Chi. The Award Committee includes J. P. Guilford, chairman; Lucille K. Forer, and Stanley L. Singer.

Psi Chi, national honorary society in psychology, announces a fifth annual grant-in-aid for student research to be made by the Britt Foundation, founded by Steuart Henderson Britt. Application forms may be obtained either from chapter faculty advisers or from the national executive secretary, Lucille K. Forer, 2170 E. Live Oak Drive, Los Angeles 28, California. Completed applications must be received by Dr. Max Meenes, Chairman of the Psi Chi Committee on Awards, by November 15, 1954. His address is c/o Department of Psychology, Howard University, Washington, D. C.

National Science Foundation Research Grant Awards. The following research grants have recently been awarded:

Boston University—J. M. Harrison, \$9,400 for a two-year study on "The Relation between the Hippocampus and Sensory Hyperasthesia."

University of Southern California—W. W. Grings, \$9,400 for a three-year study on "Studies of Stimulus Patterning in Learning."

The Florida State University—W. N. Kellogg, \$7,000 for a one-year study on "Echolocation in the Dolphin."

The George Washington University—B. H. Fox, \$5,900 for a one-year study on "Research on Vision."

The Johns Hopkins University—Edward F. Mac-Nichol, Jr., \$9,800 for a three-year study on "Visual Research."

Northwestern University—A. Leonard Diamond, \$9,000 for a two-year study on "The Psycho-Physiology of Vision: Simultaneous Brightness Contrast."

University of Utah—P. B. Porter, \$10,000 for a two-year study on "Psychological Effects of Antimetabolites."

Rutgers University—D. S. Lehrman, \$9,500 for a two-year study on "The Physiological Basis of Incubation Behavior in the Ring Dove."

The University of Wisconsin—W. J. Brogden, \$15,100 for a three-year study on "Verbal Factors in the Learning of Motor Skill."

The University of Wisconsin—K. U. Smith, \$7,800 for a two-year study on "The Role of Perception in Patterned Motion."

Yale University—F. A. Logan, \$5,200 for a oneyear study on "Conditions of Reinforcement."

Yale University—K. C. Montgomery, \$11,400 for a two-year study on "Exploratory and Fear Behavior in Lower Mammals."

George Edward Briggs, University of Wisconsin, and Byron Adams Campbell, Yale University, have been awarded postdoctoral fellowships by the National Science Foundation.

A research project concerning the attitudes of parents of exceptional children was initiated in 1950 by Harry V. Bice and Phyllis F. Bartelme. Some of the basic concepts have been published in various professional journals and pamphlets. Statements made by parents have been incorporated into an instrument for investigating a variety of parental attitudes and opinions. The first of a series of inventories of attitudes and opinions known as the APEX Studies (Attitudes of Parents of Exceptional Children) is concerned with cerebral palsy.

The Social Science Research Council will offer in 1955 the several types of fellowships and grants awarded in the present year, and in addition plans to hold two institutes in mathematics for social scientists in the summer of 1955. A more detailed announcement of the following offerings is to be issued in October, and applications for most types of awards will be due soon after the first of January.

Research Training Fellowships, predoctoral and postdoctoral, for "more advanced research training than that which is provided in the usual PhD program." All PhD requirements except the thesis must be met before tenure of fellowship may begin, but application need not be deferred until that point has been reached.

Faculty Research Fellowships, providing halftime support for research for three-year terms. Open to college and university social science teachers, normally not over 35 years of age.

Grants-in-Aid of Research, to aid scholars of established competence in meeting direct expenses of their own research projects. Not open to candidates for degrees.

Undergraduate Research Stipends, open only to college juniors, for supervised research during the summer and the ensuing senior year. Some appointees will be granted first-year graduate study fellowships for the next year.

Institute in Mathematics for Social Scientists, eight-week sessions to be held during the summer of 1955. Open to predoctoral and postdoctoral students and younger faculty members in social sciences who wish to improve their mathematical competence. A limited number may receive stipends.

In addition to the fellowships and grants listed above, the Council will be able during the coming year to offer certain other types of assistance for study and research, among them:

Interuniversity Summer Research Seminars will be supported on the basis described in Social Science Research Council Items, March 1954, pp. 4-6.

Summer Research Training Institutes will be organized if groups of social scientists indicate interest in intensive technical or interdisciplinary training in fields related to their primary interests and experience. A description of this program was published in *Items*, June 1954, pp. 17–18.

Inquiries should, if possible, be made early in the autumn, so that there will be ample time for preparation of definite applications before the closing date. Please address the Social Science Research Council, 726 Jackson Place N.W., Washington 6, D. C.

Convention Calendar

American Psychological Association: September 2-7, 1955; San Francisco, California

For information write to: Dr. Fillmore H. Sanford 1333 Sixteenth Street N.W. Washington 6, D. C.

Illinois Psychological Association: October 5-6, 1954; Chicago, Illinois

For information write to: Professor George Speer Illinois Institute of Technology 3329 S. Federal Street Chicago 16, Illinois

American Occupational Therapy Association: October 16-22, 1954; Washington, D. C.

For information write to:
Miss Marjorie Fish, Executive Director
American Occupational Therapy Association
33 West 42nd Street
New York, New York

American Speech and Hearing Association: October 25-27, 1954; St. Louis, Missouri

For information write to: Dr. E. H. Henrikson Speech and Hearing Clinic University of Minnesota Minneapolis 14, Minnesota

National Society for Crippled Children and Adults: November 3-5, 1954; Boston, Massachusetts

For information write to:
Miss Jane Shover
National Society for Crippled Children and Adults, Inc.
11 South La Salle Street
Chicago, Illinois

Acoustical Society of America: November 18-20, 1954; Austin, Texas

For information write to: Dr. R. N. Lane University of Texas Austin, Texas

American Vocational Association: December 2-7, 1954; San Francisco, California

For information write to:
Dr. M. D. Mobley
American Vocational Association
1010 Vermont Avenue, N.W.
Washington 5, D. C.

Southwestern Psychological Association: December 16-18, 1954; Oklahoma City, Oklahoma

For information write to: Dr. Ernestine B. Blackwell Division of Mental Health State Department of Health Austin, Texas American Association for the Advancement of Science: December 26-31, 1954; Berkeley, California

For information write to:
Dr. R. L. Taylor
Associate Administrative Secretary
1515 Massachusetts Avenue N.W.
Washington 5, D. C.

Gerontological Society: December 28-30, 1954; Gainesville, Florida

For information write to: Dr. N. W. Shock Baltimore City Hospitals Baltimore 24, Maryland

American Anthropological Association: December 28-30, 1954; Ann Arbor, Michigan

For information write to:
Dr. W. A. Lessa
Department of Anthropology and Sociology
University of California
Los Angeles 24, California

American Genetic Association: January 13, 1955; Washington, D. C.

For information write to: Managing Editor Journal of Heredity 1507 M Street N.W. Washington 5, D. C.

American Group Psychotherapy Association: January 14-15, 1955; New York City

For information write to:
Mr. George Holland
American Group Psychotherapy Association
228 East 19th Street
New York 3, New York

Ontario Psychological Association: February 4-5, 1955; Hamilton, Ontario, Canada

For information write to:
Mr. W. H. Coons
Ontario Hospital
Hamilton, Ontario, Canada

American Orthopsychiatric Association: February 28– March 2, 1955; Chicago, Illinois

For information write to: Dr. Marion L. Langer American Orthopsychiatric Association 1790 Broadway New York 19, New York

Child Study Association of America: March 7-8, 1955; New York City

For information write to:
Dr. Gunnar Dybwad
Child Study Association of America
132 East 74th Street
New York 21, New York

Aero Medical Association: March 21-23, 1955; Washington, D. C.

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